2016 CSU Counselor Conference
College of Science

- Seven Departments
- 23 undergrad degrees
- 120 full-time tenured/tenure track faculty
- 150 lecturers
- 2,100 undergrads
- 750 grad students (MA, MS, MBT)
- Hands-on, lab-oriented
- Research/projects with Faculty
- Student orgs (~20)
Departments

• Biological Sciences
  • Chemistry
• Computer Science
  • Geology
• Mathematics and Statistics
• Meteorology and Climate Science
  • Physics and Astronomy
Biology is a natural science concerned with the study of life and living organisms, including their structure, function, growth, origin, evolution, distribution, and taxonomy.

Student working with Scott Shaffer on the stress physiology in juvenile northern elephant seals (Mirounga angustirostris), specifically hormones in the HPA-axis and thyroid.

Biological Sciences

- BA, Biological Science
- BS, Biological Science, Concentrations:
  - Ecology and Evolution
  - Marine Biology
  - Microbiology
  - Systems Physiology
  - Molecular Biology
Chemistry

• BA Chemistry
• BS Chemistry
• BS Chemistry, concentration Biochemistry

Assistant Professor Lionel Cheruzel and research group. His research is focused on Cytochrome P450 and the synthetic potential for biotechnological applications.

Chemistry is the study of matter and change. Chemistry is often thought of as the "central" science, and ranges from physical processes on the one hand to biological processes on the other.
Computer Science

- BS Computer Science
- BS Software Engineering
  - Joint degree with Computer Engineering

CS185C: “Introduction to Big Data” takes a look at wrangling data that can be used for establishing business trends, tracking infection rates, fighting cyber crime, or even screening potential employees.

The computer science faculty includes authors of standard texts in such areas as Java, C++, programming languages, compiler design, parallel processing, and web programming. Many of the faculty are also active in research, in a variety of areas such as computer architecture, network protocols, multimedia systems, and scientific computing.
Geology

- BA Earth Science
- BS Geology

Structural Geology class studies the folds of the Talc City Hills

SJSU is the largest CSU Geology Department in the Bay Area and has faculty that are actively engaged with students and in research. The field emphasis of the program leads to close student-faculty interaction. Almost all of our graduates are employed in the Earth Sciences or are in graduate school.
Mathematics

- BA Mathematics
- BA Mathematics, Teacher Preparation
- BS Applied Mathematics with concentrations:
  - Applied and Computational Mathematics
  - Economics and Actuarial Science
  - Statistics

The Math Department is the largest department at San Jose State. The Math Department is the home of the Center of Applied Math, Computation and Statistics (CAMCOS) where students under the supervision of a professor work on industrial math problems provided by a local business, government, or industry sponsor.
Meteorology and Climate Science

• BS Meteorology
• BS Meteorology, concentration in Climate Science

Craig Clements and students studying micro-meteorology and behavior of wild fires

The Department of Meteorology and Climate Science is the only one of its kind in the entire CSU. We provide students with an in-depth knowledge of the atmosphere and prepare them for careers in the atmospheric sciences. Meteorology faculty maintain active research programs that benefit the science community and enhance our students' learning environment.
Physics and Astronomy

- BA Physics
- BA Physics, Teacher Preparation
- BS Physics

Students attending the 2015 Conference for Undergraduate Women in Physics at UC Santa Cruz

The Department of Physics and Astronomy is proud of its excellent faculty composed of outstanding teachers and researchers. Our courses prepare students for careers in technical fields, graduate study in the sciences, and jobs as far afield as astrophysics and animation. Visit www.physics@sjsu.edu for more information.
PreProfessional Students

• No specific preprofessional degree
• Professional schools do not require a specific degree
  – Required prerequisite classes
• Choose degree that can excel in- GPA counts!
Special Programs

- Clinical Laboratory Scientist Training Program (CLS)
- Clinical Genetic Molecular Biologist Scientist (CGMBS)
- Stem Cell Internships in Laboratory-based Learning (SCILL) Program
- Professional Science Master of Biotechnology (MBT)
- MS Medical Product Development Management (MPDM)
Student Success

- College of Science Advising Center (CoSAC)
- Freshman and Transfer Orientation
- Early warning – Major GPA and Degree Progress
- Supplemental Instruction
- Tutoring
- Peer Advisors
- Student Clubs
- Preprofessional Clubs

2015 Four San Jose State current/former students awarded National Science Foundation Graduate Research Program Fellowships
Student Opportunities

• Louis Stokes Alliance for Minority Participation (LSAMP)
  – Summer prep courses in pre-calculus and chemistry
  – Graduate school preparation seminar
  – Academic excellence workshops

• NIH Minority Access to Research Careers (MARC)
  Student Research stipends

• NSF Scholars in Science Scholarship Program (S^3)
College of Science Advising (CoSAC)

• -- College of Science has MANDATORY Academic Advising EVERY semester

-- College of Science Advising Center located in Duncan Hall 211, open 8:30am-4:30pm to assist you with advising needs (www.sjsu.edu/cosac)
Transitioning to SJSU

- Different processes and deadlines
- Be prepared to work hard
- Be self-motivated
- Time management is often challenging
- Work-life balance
  - 12 units is equivalent to a 36 hours of work/week
Success at SJSU

• Get help early
• Form Study groups
• Join Student Clubs
• Explore intern and research opportunities
• Make an effort to meet faculty
  – Go to office hours
• Take advantage of resources
  – Advising centers, tutoring, workshops
Scholarships

• Many scholarships available

• Financial Aid page: Spartan Scholarships
  www.sjsu.edu/faso/Scholarships

• College of Science Deadlines: April 30, 2017
He started as a film major at SJSU, but a fraternity friend introduced him to the College of Science. He is attending medical school in St. Louis, planning to focus on endocrinology, as he is interested in the role that hormones play in the body.
Outstanding Graduating Senior 2015-
Marc Gancayco

He received fellowships from the University of Illinois, Urbana-Champaign (UIUC) Graduate College and the National Science Foundation Graduate Research Fellowship Program. He is in his second year pursuing a doctorate in chemical biology at UIUC
NSF Graduate Research Fellowships

Three awarded to SJSU Students in 2016

Dina Verdin- Engineering
Luis Enrique Sandoval- Microbiology
Kirandeep Deol- Chemical Biology
Career Development

• Check out the Career Center
  http://www.sjsu.edu/careercenter/

• Thinking about graduate school/professional school?
  Get involved with undergraduate research, Internships, Graduate courses

• Thinking about teaching math or science in a K-12 classroom?
  Sign up for Minor in Science Education
  SJSU Credential programs