

# College of Sciences

## Vision, Mission, and Goals

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### 1.0 Vision

The College of Sciences (COS) will educate students to fulfill the evolving opportunities in science, emphasizing the ability to integrate and apply principles of science and mathematics to answer questions in basic research and solve real world problems.

The COS will make distinctive contributions to scientific research, addressing evolving scientific challenges that will expand scientific knowledge and benefit society.

### 2.0 Mission

The mission of the COS is to contribute to scientific knowledge in ways that have important local and global impacts, to train scientists who possess a fundamental understanding of their fields and the expertise needed for future careers in local and regional industries or graduate and professional programs, to improve the training of future mathematics and science teachers, and to ensure scientific literacy of all SDSU graduates. The college will continue to evolve to meet the changing needs of students, the local community, and society in the future. To achieve this mission, every faculty member is expected to demonstrate excellence as a teacher and scholar.

### 3.0 Educational goals

Undergraduate and graduate education is a fundamental part of the COS mission. The COS will pursue the following educational goals to prepare our students to face and define the challenges of the future and to sustain and strengthen our teaching excellence.

- 3.1 Foster development of critical thinking and quantitative skills.
- 3.2 Cultivate writing, reading, and oral communication skills.
- 3.3 Provide students with both substantial expertise in a discipline of science and mathematics and broad interdisciplinary training.
- 3.4 Offer advanced undergraduate and graduate students professional training and preparation for further study in a broad range of disciplines.
- 3.5 Develop innovative courses and curriculum in response to intellectual and professional needs of undergraduate and graduate students.
- 3.6 Regularly update courses and curriculum in response to recent advances in science and mathematics.
- 3.7 Encourage interactions with diverse professional and community groups to enhance teaching and research.
- 3.8 Encourage faculty to respond to increasing international influences on science and society by integrating international perspectives into educational activities.
- 3.9 Promote a commitment to lifelong learning.

## **4.0 Research goals**

Research is an equally important part of the COS mission. The COS will pursue the following research goals to respond to and define the scientific challenges of the future and to prepare our students for careers in science.

- 4.1 Contribute to scientific advancements by promoting basic, applied, and translational research.
- 4.2 Provide opportunities for undergraduate and graduate students to become involved in research projects under the supervision of active research faculty.
- 4.3 Enhance our commitment to research by increasing externally funded projects and expanding graduate programs as appropriate.
- 4.4 Serve the needs of the region by encouraging faculty to interact with representatives of industry to consult or collaborate on basic, applied, and translational research endeavors.
- 4.5 Enhance public understanding of science by promoting the dissemination of research discoveries in public forums and the media.

## **5.0 Diversity goals**

The university is composed of faculty, staff, and students of diverse racial, ethnic, language, culture, social class, national origin, religious and political belief, age, ability, gender, gender identity, and sexual orientation. A fundamental commitment to diversity enriches the institution and provides an atmosphere in which all human potential is valued, promotes learning through interactions among people of different backgrounds and perspectives, and better enables the university to prepare all members of the community.

- 5.1 Strive to enhance faculty, staff, and student diversity and accessibility to better reflect student demographics.
- 5.2 Promote actions, programs, and policies that foster diversity and engender the vigorous exchange of ideas, enhance respect and consideration for individuals and groups, and strengthen the understanding of our mutual dependence.
- 5.3 Cultivate an environment that promotes human dignity, civility, and mutual appreciation for the uniqueness of each member of our community. Freedom from discrimination, harassment, and violence against persons or property is a basic right.
- 5.4 Sustain our commitment to recruitment and retention of underrepresented students by securing external funding to provide support activities such as tutoring, workshops, and mentorship.