

GOAL 1: Student Success

CALIFORNIA STATE UNIVERSITY SAN BERNARDINO		CSUSB COLLEGE OF NATURAL SCIENCES		
Strategic Focus	CSUSB Strategic Objectives	CNS Strategic Focus	CNS Strategic Objectives	CNS Strategic Implementation
<p><i>Build an identity that celebrates the uniqueness of our university, promotes our accomplishments, and inspires involvement.</i></p>	<p>1. All undergraduate students will participate in at least three High Impact Practices (HIPs) by graduation, starting with the fall 2015 cohort of incoming first-year students, preferably including one HIP within the context of each student's major.</p>	<p><i>Provide rigorous academic programs that offer broad general education and advanced science content via inquiry-based active learning opportunities in the lab, field, classroom, library and community that expose students to open-ended problem solving and real-life personal and career applications .</i></p>	<p>A) Enrich undergraduate and graduate experiences by increasing the availability of High-Impact Practices (HIPs), including a combination of evidence-based teaching, culminating senior experiences, internships, practicums, field experiences, research with faculty, service learning and community engagement.</p>	<p>(1) Encourage CNS faculty participation in the campus-wide HIPs Community of Practice that will be established according to Strategy 1.2 of CSUSB strategic plan; CNS Dean should collaborate with upper administration to find ways to "Intentionally offer administrative support, stipends, reassigned time, etc." to encourage and reward faculty to incorporate HIPs in their teaching.</p>
				<p>(2) Pursue external and internal funding to support development and implementation of HIPs</p>
				<p>(3) Encourage departments and the College Evaluation Committee to recognize implementation of HIPs in the RPT process.</p>
	<p>2. Adopt the Institutional Learning Outcomes and use the assessment of them to guide continuous program improvement.</p>		<p>B) Foster a thoughtful approach to the Quarter to Semester conversion by providing faculty, staff and students the appropriate time, tools, and compensation to develop and implement Program Learning Outcomes that are aligned with Institutional Learning Outcomes and curricula that achieve both.</p>	<p>(1) Participate in cross-college Q2S meetings; being incorporated into their proposed semester curriculum.</p> <p>(2) Support a CNS Q2S curriculum coordinator.</p> <p>(3) Schedule meetings for inter-departmental conversations as needed.</p> <p>(4) Ensure that programs include discussion of how HIPs are being incorporated into their proposed semester curriculum.</p>
	<p>3. Conduct annual surveys to assess students' sense of belonging, engagement, and inclusion. Establish baseline measures and then design programming to ensure continual improvement.</p>		<p>C) Use a data-driven approach to promote student success.</p>	<p>(1) Work with Institutional Research to develop appropriate tools for planning.</p> <p>(2) Review results of campus-wide student surveys and discuss any needed action at CNS chairs meetings.</p>

	<p>4. Increase student success by maintaining high academic standards while reducing the overall DFWI (D, F, withdrawal, incomplete) rate through improved course learning conditions and enhanced co-curricular support. Aim to reduce the rate in lower division courses from 13% to 10%, and aim to reduce the upper division rate from 8% to 6%, particularly through providing additional supports for students in courses with the highest DFWI rates.</p>		<p>D) Reduce the DFWI rates while maintaining rigor and quality of CNS courses.</p>	<p>(1) Identify courses with high DFWI rates and evaluate how top students achieve academic success in these courses.</p> <p>(2) Create and implement plans based on success students to reduce DFWI rates within CNS (e.g. seek SSI funding for initiatives that support student achievement such as tutors, extra sections, supplemental instructions and other HIPs.)</p>
	<p>5. Stay on track to meet or exceed the CSU's Graduation Initiative 2025 targets with a four-year graduation rate in 2020 of 15% or higher, a six-year graduation rate of 52% or higher, and an underrepresented minority (URM)/non-URM achievement gap of 0%. For transfer students, by 2020 achieve a 36% two-year graduation rate and a 72% four-year graduation rate. Reduce by half the achievement gaps for males and Pell-eligible students. Decrease average time-to-completion for students who enroll as freshmen from 5.6 to 5.0 years by 2020. For transfer students, decrease average time-to-completion from 3.1 to 2.7 years by 2020.</p>		<p>E) Meet or exceed the CNS graduation rate targets of a 4-year graduation rate of 24% for first time freshmen and a 2-year transfer graduation rate of 16% for the students admitted in 2021 a 2023, respectively.</p>	<p>(1) Tailor time-to-graduation targets to the needs of individual students.</p> <p>(2) Provide workshops for CNS faculty advisers on best-practices for advising and use of SSC Campus.</p> <p>(3) Provide students with strong, effective and intrusive academic and career advising for guiding students throughout their academic studies.</p> <p>(4) Work with feeder high schools and community colleges to prepare and attract high caliber students while maintaining or enhancing diversity.</p>
	<p>6. To foster the success of graduate students, by June 2017, the campus will complete a program evaluation of graduate education at CSUSB. From 2017 through 2020, these recommendations will be implemented.</p>		<p>F) Foster the successful transition of undergraduate & graduate students into the work force or further education.</p>	<p>(1) Work with the Departments, the Health Professions Advising Center, the Career Center and Alumni Affairs to provide career networking opportunities.</p> <p>(2) Encourage internships.</p>
			<p>G) Improve the quality of and support for graduate programs within the College.</p>	<p>(1) Provide adequate support for accredited graduate programs to maintain accreditation.</p> <p>(2) Recruit well prepared, diverse graduate students.</p> <p>(3) Encourage the TRC to provide workshops on best-practices in supervising graduate research.</p> <p>(4) Secure additional graduate stipends and/or fee waivers.</p> <p>(5) Facilitate broader faculty participation in admission of graduate students.</p>
			<p>H) Create and sustain a culture that promotes student excellence and well-being as fundamentals for academic and life success.</p>	<p>(1) Encourage students to participate in academic honor societies, professional societies, student clubs and other co-curricular activities that promote a strong sense of community.</p> <p>(2) Track and celebrate students success in areas such as making the dean's list, giving professional presentations, participating in student leadership, acceptance to graduate/professional school or obtaining employment in their field of study.</p> <p>(3) Intentionally and explicitly connect learning across curricular and co-curricular experiences so that students better understand the purposes of higher education and learn strategies to promote resilience and success beyond graduation.</p>

GOAL 2: Faculty and Staff Success

Strategic Focus	CSUSB Strategic Objectives	CNS Strategic Focus	CNS Strategic Objectives	CNS Strategic Implementation
<p><i>Foster innovation, scholarship, and discovery for faculty and staff success.</i></p>	<p>1: Foster excellence in teaching to increase High Impact Practices and promote course redesign for contemporary teaching practices by increasing the number of faculty served by the Teaching Resource Center.</p>	<p><i>Sustain and enhance faculty and staff excellence, with an emphasis given to promoting and recognizing outstanding quality in educational leadership, research, scholarly and creative contributions across the academic curriculum.</i></p>	<p>A) Provide enriched academic curricula by broadening inclusion of undergraduate and graduate research, hands-on experimental learning experiences and other high-impact, evidence-based teaching practices.</p>	<p>(1) Provide faculty support for training in developing HIPs in teaching by use of reassigned times, stipends, and/or professional development. Implement a plan for increasing the understanding and use of evidence-based teaching methods among faculty.</p>
	<p>2: By fall 2017, create a Center of Excellence to promote high impact research, creative activities, and scholarship involving interdisciplinary and international collaborators, and develop a tracking system to do the same.</p>		<p>B) Provide faculty and staff the appropriate time, tools, and compensation to develop and implement curricula that achieve learning outcomes.</p>	<p>(1) Ensure that the CNS has a strong and proactive advocate within the Faculty Center for Excellence, the Q2S committees and the Provost's Faculty Workload Committee.</p>
	<p>3: Increase funding, incentives, reassigned time, and recognition for research, creative activities, and scholarship to enhance the university's reputation as a center of scholarship.</p>		<p>C) Provide faculty the appropriate time, tools, and compensation to develop and implement strong research programs.</p>	<p>(1) Promote strong and proactive CNS advocacy for funding and support opportunities within the Faculty Center for Excellence, Office of Graduate Studies, Office of Academic Research, Office of Student Research, Office of Research and Sponsored Programs and the Provost's Faculty Workload Committee.</p>
				<p>(2) Build on CNS's current success to support research, including cross-disciplinary research clusters, providing a rich learning environment for our faculty and students.</p>
	<p>4: Increase funding and faculty reassigned time to provide more student opportunities for supervised research and creative activities.</p>		<p>D) Provide an environment of support and mentorship to encourage staff to pursue professional growth through staff participation in college/university committees, professional development opportunities, and career development to increase job and personal satisfaction.</p>	<p>(3) Fund faculty research through increased support for attendance at professional conferences and the acquisition of state-of-the-art instrumentation, research software, databases and facilities and the provision of graduate student stipends & fee waivers.</p>
				<p>(1) Encourage and provide time for CNS staff members to participate in college/university committees, to pursue professional development and life-long learning opportunities offered by the campus, CSU system and professional organizations, to increase specialized skills related to their current position, to learn skills to help adapt to the changing demands of the workplace and to acquire the knowledge to advance professionally.</p>
	<p>5: By 2017, develop a plan to increase training opportunities for staff.</p>		<p>E) Recruit and retain outstanding and diverse faculty, staff, and administrators.</p>	<p>(1) Share and adopt best practices for increasing diversity within applicant pools and throughout the recruitment process.</p>
<p>6: Increase the diversity of tenure/tenure-track faculty, adjunct faculty, and staff as well as improve the climate of inclusion and support.</p>	<p>(2) Encourage departments to begin searches early.</p>			
	<p>(3) Provide effective training on implicit bias to recruiting committees.</p>			
<p>7: Increase Tenure Track Density (TTD) based on projected student demand and FTES growth, and decrease Student to Faculty Ratio (SFR).</p>	<p>F) Achieve the University's goal of increasing Tenure Track Density (TTD) to 63.6%. And decreasing the Student Faculty Ratio (SFR) from 29.9 to 23.8.</p>	<p>(4) Encourage students from underserved groups to pursue advanced degrees and to pursue careers in academia.</p>		
		<p>(5) Submit an NSF Advance Grant.</p>		
<p>(6) Provide an environment of support and mentorship for the retention of our new-faculty.</p>	<p>(1) Collect data to build the case for additional tenure-track faculty lines and resources supporting the University's and CNS's strategic goals</p>			
<p>(2) Pursue funding for endowed chairs.</p>				

GOAL 3 – Resources: Sustainability and Expansion				
Strategic Focus	CSUSB Strategic Objectives	CNS Strategic Focus	CNS Strategic Objectives	CNS Strategic Implementation
<i>Steward resources for sustainability, and acquire new sources of funding.</i>	1: Secure at least two nationally recognized public and/or private partnerships to facilitate growth and innovation.	<i>Provide for the current and anticipate the future needs for modern, state-of-the-art teaching and research facilities and the funds necessary to provide a rich teaching and research environment for students, staff and faculty.</i>	A) Play an increased role in improving both public and private partnerships among school districts, national and international universities, science agencies, businesses, and other community partners that will improve the delivery of undergraduate /graduate education, teaching and learning through innovative, evidence-based transformations.	(1) Participate in K-12 science/math educational pedagogy and teacher preparation institutes and DOE/ NSF/Private foundation grants.
	2: Develop infrastructure; revise, update, and create new processes by fall 2017 to enable the university to launch and increase innovative entrepreneurial activities.		B) Support campus activities to promote a comprehensive national and international curriculum of higher education serving a global, diverse student population.	(2) Promote the participation of CNS departments and faculty in innovative partnerships with other CSUSB colleges, CEL, high schools and other regional, national and international colleges, universities and industries.
	3: Increase non-resident revenue by 5% annually, and increase the five year philanthropic productivity average by 12% at the end of 2020.		C) Strategically invest and actively promote the needs of CNS in terms of facilities, equipment, instrumentation, staffing and workload requirements during the university's re-allocation process.	(3) Support applications to all funding agencies, such as the NSF, DOE, NASA, USDA, NIH, and other public and private science partners.
	4: Plan and implement a process by which existing resources (space, budget, staffing) are re-allocated efficiently, increase off-campus space utilization to 5% by 2020, and increase process efficiency by completing process mapping of 25 major and impactful functions across the university.		D) Continue to seek internal and external grant funding for teaching and research initiatives for all departments in the CNS.	(1) Identify and reduce barriers that hinder the progress of non-resident/international students.
	5: Increase the number of proposal submissions of contracts, grants, and philanthropic sectors by at least 5% annually with a targeted increase of 25% by 2020. Increase new award funding to at least \$25M/year by 2020.		E) Increase funding from foundations and other philanthropic sources for teaching and research initiatives for all departments in the CNS.	(1) Work with upper administration to plan and seek funding for new science buildings with laboratory facilities.
			(2) Develop and implement an equitable plan for allocation of funds for departmental operating budgets.	
			(3) Effectively lobby for an appropriate number of tenure-line faculty positions within the College.	
			(4) Ensure that CNS faculty workloads are commensurate with workloads in other colleges.	
			(1) Encourage CNS faculty to prepare and submit individual, multi-PI and center-based proposals for external funding.	
			(2) Work with Research and Sponsored Programs to identify new opportunities for external research funding and support the preparation of grant and fellowship proposals.	
			(3) Provide assigned time to faculty who obtain research grants.	
			(4) Encourage faculty submissions of internal grants such as SSI VETI grants.	
			(5) Encourage faculty submissions of external proposals for equipment.	
			(1) Hire a CNS Director of Development.	
			(2) Strengthen the collaboration with the college's alumni, development staff and community partners to build on the college's capacity for and success in raising private funds.	

GOAL 4 – Community Engagement and Partnerships				
Strategic Focus	CSUSB Strategic Objectives	CNS Strategic Focus	CNS Strategic Objectives	CNS Strategic Implementation
<p><i>Serve and engage communities (local, regional, state, national, global) to enhance social, economic and cultural well-being.</i></p>	<p>1: By 2017, identify and prioritize strategic opportunities for aligning community needs with appropriate university resources for mutual benefit.</p>	<p><i>Promote stronger collaborations between the college and community stakeholders (business, K-14, nonprofit organizations, government agencies) that take advantage of the college's educational and research strengths.</i></p>	<p>A) Identify and prioritize strategic opportunities that align the resources and advance the needs of the community and CNS (PDC and SBC).</p>	<p>(1) Work with the University's Community Engagement Office and Career Center to increase the number of internships, service learning, and community engagement opportunities.</p>
	<p>2: Increase the number of strategic community-university engagement activities by 2020.</p>		<p>B) Provide advisory pre-college/transfer activities at feeder high schools and community colleges that will attract students with diverse backgrounds and varying levels of academic preparation.</p>	<p>(1) Seek funding for faculty and staff to participate in activities aimed at engaging middle- and high-school students to increase college preparation and university attendance.</p> <p>(2) Participate in university recruitment activities that target high-potential students with diverse backgrounds and interests with varying levels of academic preparation to attend CSUSB.</p>
	<p>3: By 2020, build capacity to increase and sustain curricular and co- curricular service learning opportunities and/or community engagement activities.</p>		<p>C) Strengthen student pathways to post-graduate studies in Master's, Ph.D. and professional programs both within the University and at other institutions.</p>	<p>(1) Increase the number of undergraduates enrolling in the College's Master's of Science programs in Biology, Computer Science, Earth & Environmental Sciences, Health Services Administration, Mathematics, Nursing, and Public Health.</p> <p>(2) Improve articulation agreements and seek new MOUs with universities offering advanced graduate and professional degrees (such as PhDs, MDs, PTs, DNPs, etc.)</p>
	<p>4: By fall 2018, publicize CSUSB's commitment to community engagement as a key component of the university's culture and image with the establishment of a recognition and reward system for excellence in community engagement and collaborative work.</p>		<p>D) Increase the college's community engagement by identifying, developing and offering needed degrees, certificates, supplemental courses and programs.</p>	<p>(1) Develop department and/or CEL based degrees, certificates and supplemental courses and programs (such as the RN to BSN) to meet critical community needs.</p>
			<p>E) Expand the College's role in the dissemination of science , technology, and knowledge of the world and universe.</p>	<p>(1) Work with the Office of Strategic Communication to disseminate to local, regional, and national news outlets events at the Murillo Family Observatory, Scheba Lectures, and other CNS sponsored events.</p> <p>(2) Promote the wide distribution of the CNS Natural Phenomena.</p>

GOAL 5-Identity				
Strategic Focus	CSUSB Strategic Objectives	CNS Strategic Focus	CNS Strategic Objectives	CNS Strategic Implementation
Build an identity that celebrates the uniqueness of our university, promotes our accomplishments, and inspires involvement.	1: CSUSB will have a well-defined and supported university identity as measured by students, faculty, staff, alumni and community perceptions by June 2020.	<i>CNS will build on its identity as a leader in the field of STEM + H</i>	A) Promote the identity of the CNS within the local community	(1) Work with the Office of Strategic Communications to issue press releases about noteworthy activities of CNS faculty and students.
				(2) Train and assist students and faculty to represent the CNS well in all community-engagement activities, such as internships, clinicals, service learning activities and engagement with professional organizations.
				(3) Explore ways to improve CNS social media presence.
	2: Create a vibrant and memorable student life experience that reinforces the university's identity to increase student engagement in campus activities by 10% by 2020.		B) Provide prospective students a comprehensive understanding of the life-transforming opportunities of pursuing and earning a baccalaureate and/or graduate STEM-H degree.	(1) Market the unique one-on-one, small group faculty/student interactions available in CNS classroom and research laboratories.
				(2) Implement and expand the number of STEM-H grants, such as the current "Promoting Pre- and Post-transfer Success in STEM at Hispanic Serving Institutions" grant.
				(3) Encourage collaboration between faculty and advisors at meaningful University outreach events.
				(4) Revise and enrich web-site presences that showcase CNS college/department activities that would be of interest to prospective students.
				(5) Collaborate with Admissions and Student Recruitment to link CNS majors with their K-14 educational institutions.
	3: Increase prospective students' perceptions of CSUSB as a university of choice from 68% to 78% by 2020 as measured by 2012 Institutional Research (IR) Campus Quality Survey.		C) Promote the identity of the CNS within the University	(1) Develop mechanisms for effectively communicating the College's successes to the campus community, including faculty and student successes in publications, grants, presentations, graduation, and participation in professional /community organizations.
				(2) Broadly advertise services provided by the PEER/HPAC/STEM advising centers.
(3) Revise and enrich web-site presences that showcase CNS college/department activities.				
4: Increase positive perceptions of CSUSB with internal and external audiences by 10% over baseline by 2020.	D) Promote the identity of the CNS within the professional communities associated with the STEM + H disciplines.	(1) Encourage and support CNS faculty and student presentation of research (including scholarship of teaching) at professional conferences, at local professional societies, as invited speakers at other universities, etc.		
		(2) Encourage and support CNS faculty involvement in leadership positions within professional societies.		
5: Increase alumni engagement by 10% by 2020, as measured by the Alumni Affairs alumni activity report.	E) Increase engagement of CNS alumni	(1) Develop more career networking opportunities for current students with our alumni. (2) Support the CNS Development office in their Alumni outreach activities such as "Professor for a Day".		
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