The College of Natural and Behavioral Sciences

California State University, Dominguez Hills

Strategic Plan

THE COLLEGE:

The natural and behavioral sciences have been organized into various colleges and schools throughout the 50 year history of California State University, Dominguez Hills. In the beginning, California State College at Palos Verdes was organized into the School of Humanities and Fine Arts, the School of Natural Sciences and Mathematics (NSM) and the School of Social and Behavioral Sciences (SBS). Included in NSM and SBS were the departments of biological sciences, chemistry, mathematics, economics, history and psychology. In the late 1960's we became California State College, Dominguez Hills and NSM expanded to include health, physical education and medical technology but later these programs were moved to other units within academic affairs. During the 1960's and beyond, Dominguez Hills also had interdepartmental fields of concentration which included earth and space sciences, the foundations of natural science and information and communication systems.

In the 1980's NSM became the College of Science, Mathematics and Technology (SMT) which housed chemistry, biology, clinical science, computer science, geology, geography, quality assurance, physics, and mathematics. During the budget crisis of the early 1990's, academic units were reconfigured and the humanities, arts, programs in SMT and the social and behavioral sciences were combined into the College of Arts and Sciences. As the economic health of the State improved, the natural and behavioral sciences were split from the arts and humanities and in 2003-2004 the College of Natural and Behavioral Sciences was formed under the direction of the Provost and Vice President for Academic Affairs Dr. Allen Mori. NBS became home to the academic departments/programs of Anthropology, Behavioral Sciences, Biology, Chemistry and Biochemistry, Computer Science/Technology, Earth and Environment (Geology and Geography), Mathematics, Physics, Psychology, and Sociology. In 2010 Political Science joined the College raising the total number of departments/programs to eleven. The College also houses the Urban Community Research Center, the Center for Urban Environmental Research, and the Center for the Advancement of Diversity in Science and Mathematics. Each of these centers has a specific focus related to the mission of the College.

Since its inception, NBS adopted the "teacher-scholar" model that sees professors as both teachers and scholars/researchers. In fact, we see teaching and research as interdependent and strongly feel that our students are best served by professors who involve them in research projects. The teacher-scholar model works best without huge teaching loads so the previous Dean, Dr. Charles Hohm, strived to reduce the standard teaching load in NBS to 9 units per semester for tenure track/tenured colleagues who are involved in research. One way to achieve this goal was to increase the enrollment number in select classes (e.g. Lower division GE courses) and give tenure track/tenured faculty released time for research by using CSU approved work load assignments such as "Instructionally Related Research." The second way to reduce the teaching load was to garner grants and contracts that contained funds to buy out the teaching of faculty who were involved in research. This model continues in the college and, in our strategic plan presented below, reduction in teaching load for research and scholarship continues to be at the forefront.

THE MISSION OF THE COLLEGE:

The College of Natural and Behavioral Sciences includes programs in anthropology, biology, behavioral science, chemistry/biochemistry, computer science/technology, earth and environment, mathematics, physics, political science, psychology, and sociology. We seek to improve the scientific literacy, critical thinking, and problem solving skills of all CSUDH students and to prepare our majors to enter and become leaders in the scientific workforce. Students in our College become of aware of the importance of science in their lives and their communities and extend this knowledge on national and global scales. Our majors are provided with opportunities to participate in cutting-edge research with faculty mentors, engage in service learning in their communities and achieve better understanding of their discipline through internships. Our graduates emerge ready to enter the workforce, contribute to their communities as educated members or move on to top ranked graduate or professional schools.

THE SUCCESS OF THE COLLEGE:

NBS faculty members are outstanding teachers and bring cutting-edge teaching methods to the classroom. NBS faculty are also committed to involving students in their research giving them an opportunity to work side-by-side with a faculty mentor on significant research which often results in publication in peer-reviewed journals and presentations and national scientific meetings. Because of their excellent classroom preparation and research experiences, a number of our graduates gain admittance to the most prestigious graduate and professional programs in the country, including, but not limited to, those at Johns Hopkins, Northwestern, Michigan, Wisconsin, Indiana, Ohio State, USC, UC campuses, New York University, Purdue, and the University of Texas. As an example of student success, two of our graduates are now faculty, one at the University of Missouri and the other at Columbia University. Other graduates have become medical doctors, pharmacists or top-level researchers at biotechnology or pharmaceutical companies.

The faculty members of the College of Natural and Behavioral Sciences are successful with their external grant activity, bringing in millions over the years to support their research and scholarship. Besides basic research, the faculty members of the College are involved in community-based and applied research all of which contribute to an expanding body of new knowledge.

THE STRATEGIC PLAN

In February 2009, the University commenced the strategic planning process. By February 2010 the President's Cabinet, the Administrative Council and the Academic Affairs Council reviewed and finalized the goals. The Colleges then developed initiatives, actions and outcomes to accomplish the campus-wide goals as they related to each College. This process was completed in May 2010. By mid-June 2010, the College Deans submitted their strategic plans to the Provost and Vice President for Academic Affairs, Dr. Ronald Vogel.

Contained below are the campus-wide goals under which are included the initiatives, actions and outcomes developed by the College of Natural and Behavioral Sciences. The Chairs met several times to discuss initiatives followed by meetings with their faculty to further develop the college plan. Finally, in early May, the Chairs met with Dr. Timothy Plax to formulate the strategic plan for the College. Although the plan is not yet complete, the plan presented below will serve as a framework upon which new initiatives can be added and old ones retired.

Remaining high on the list of college priorities are the hiring of new tenure-track faculty members, an updated science building, support for research of faculty and students and continuation of and development of new academic programs for our students.

Strategic Plan – College of Natural and Behavioral Sciences
Initiatives/Actions/Outcomes determined at 5/4-5/5/10 strategic planning meetings

Goal #1: Provide outstanding academic programs that further strengthen our performance as a model comprehensive urban university

Initiative 1.1. *The College will hire new tenure-track faculty to support our programs and to maintain and strengthen the quality, consistency and continuity of existing programs and in-demand/innovative programs within the College*.

> Actions/outcomes:
> The College identified the hiring of new faculty as its number one priority. New tenure-track faculty will infuse the departments/programs with new ideas and will become mentors for our growing student population. New faculty members also mean more opportunities to obtain grant support which brings more money to the college and provides additional research opportunities for our students.
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> The faculty determined that an analysis would be completed by November 2010 to identify existing department and program needs. A quick poll of department chairs and coordinators indicated that we may need at least 42 new faculty to be hired over the next 5 years to support and strengthen our existing programs and provide research opportunities for students.

Initiative 1.2. *The college will support faculty/student research and scholarship.*

> Actions/outcomes:
> The College administration, faculty and staff are committed to providing research/scholarship opportunities for students. The faculty members realize that these out-of-the-classroom experiences prepare students for their profession and require them to use and expand the knowledge they gain in the classroom is a critical manner. In order to support faculty/student research and scholarship, the College supports a reduced teaching load, 9 WTU/semester, for full-time faculty who are conducting research/scholarship. The College is also committed to seeking funds to provide this release through grants and foundations. Once the release is provided to faculty, the impact on grant activity will be significant as well as publication rates of our faculty. We also expect an increase in student involvement in research and their co-authorship of scholarly works.

Initiative 1.3. *Provide adequate resources for departments/programs.*

> Actions/outcomes:
> The recent budget disaster has decimated our departments and programs. The College wishes to restore assigned time to chairs and coordinators, 3-9 WTU depending on program size, and provide release time for individual faculty engaging in special initiatives to strengthen departments and programs.
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> The release time will not only provide chairs and coordinators the time to run their programs effectively but will also strengthen services to students including major and career advising.

Initiative 1.4. *Curriculum improvements to strengthen existing programs and support new programs important to California's growth.*

Actions/outcomes:
To meet the changing workforce of California, the College seeks to develop and strengthen programs in areas such as energy, biotechnology/bioinformatics, homeland security, mathematics, engineering-related programs, astronomy and green technology and to implement newly approved programs such as health psychology. We also wish to fully develop departments and offer a complete selection of options. An example would be in anthropology where options in archaeology, cultural, linguistic, biological and applied anthropology are preferred.

Widening the range of programs available to our students will meet their educational needs as well as human resource needs of the community and of California.

Goal #2: Provide an excellent teaching and learning environment and achieve student access, persistence and success through graduation and beyond that matches the best urban comprehensive universities in the country

Initiative 2.1. *Obtain new science building including research laboratories for faculty and students.*

Actions/outcomes:
By far the greatest improvement to provide an excellent teaching and learning environment is to acquire a new science building. The building would house all of the college and provide state-of-the-art teaching and research laboratories for all departments. We know that the President has our building high on her list of priorities. **We cannot express enough the urgency of either obtaining an entirely new building or gutting the old building, remodeling and adding on additional lab space.**

The College is willing to undertake a detailed planning/building design exercise in conjunction with facilities planning and construction management to design a new facility competitive with science buildings on other CSU campuses. We are also willing to apply for external funding to help finance an undertaking of this magnitude. Undoubtedly the new facility will attract students, boost the morale of NBS and facilitate modernization of the curriculum.

Initiative 2.2. *Improve quality of instructional equipment, laboratories and faculty offices to meet or exceed CSU standards.*

Aside from needing a new science building, all departments need to replace outdated/broken/unsafe equipment and furniture. We wish to create a better learning environment for our students in addition to making our facilities attractive. This action cannot help but stimulate student learning, retention and graduation.

Initiative 2.3. *Restore operating expenses for departments to support a modern curriculum.*

Actions/outcomes:
The College and departments are working with less that a skeleton staff. We often play musical chairs to cover offices when personnel are absent. This results in work not being accomplished in a timely manner and students not being served.

The Collect will determine current needs for each department/program including staff support and operating expense. When funds become available we will provide funds to insure adequate supplies for laboratories and support services to help our students and faculty.

Initiative 2.4. *Provide targeted advising for students at all levels.*

Actions/outcomes:

NBS faculty are keenly aware of the importance of advising for our students. Because our faculty ranks have been decimated, there are few faculty members available for the individualized advising needed by every student during the academic year and especially during the summer when many students seek advising for their major. The College must be creative and find new ways to meet student needs. Adequate advising will retain students and move them to graduation at a higher rate.

To help solve our advising dilemma, we will require each program to create an interactive website or some form of on-line advising so faculty can communicate with students in a timely manner about progress toward their degree. The computer science department has investigated this idea previously and will be encouraged to go forward with a viable program that can be shared with other departments.

We also need to solve the problem of no major advising in the summer. Graduate and transfer students seek advising in the summer but there are no faculty members available to help the students. We have one, part-time advisor who advises undergraduates mostly from psychology and sociology. He will also be advising graduate students in sociology over the summer as no sociology faculty are available during that time. We must increase the availability of our part-time advisor to fill the void in advising. Nothing substitutes for faculty advising but during times when they are not available, our part-time advisor will carry the students until faculty are available. We would also like to secure funds to pay faculty a stipend during the summer to assist with advising during that period.

The College has some unique advising situations. We need a pre-health coordinator to advise students seeking entrance to medical and other professional schools such as dentistry and pharmacy. This type of advising is different from majors advising and requires an individual familiar with professional school admission policies. Some universities have an office dedicated to advising pre-health students. The College seeks to continue to serve this group of students and will strive to provide 6 WTU/semester to a pre-health faculty coordinator. With an increase in advising services, students have more contact with faculty and complete requirements for health professions in a timely manner. We can also track the success of our students entering medical and other professional schools.

College science faculty members are involved with the School of Education and with increasing the number of STEM teachers in training. We are responsible for advising pre-teachers who are pursuing biology degrees as well as in the biology part of the science option in Liberal Studies. This group of students needs special advising in addition to the several hundred biology majors. The College will seek funding to provide our pre-teaching faculty advisor 3 WTU/semester.

Initiative 2.5. *Support continued excellence in curriculum (teaching) so all students can achieve their potential.*

Actions/outcomes:
Budget problems forced the disbanding of the Center for Teaching and Learning. The Center provided valued workshops for new faculty and for faculty wishing to improve and update their teaching skills. We would like to continue these workshops for our current faculty and for new hires in the future.

The College will institute a faculty mentoring program similar to one provided by CTL. New faculty will be assigned a faculty mentor who will help them through their early years and provide advice on becoming a successful faculty member. We will provide workshops on pedagogy to improve faculty classroom skills. We envision that faculty will have the opportunity to participate in two pedagogy workshops/yr to improve their skills as well as in other workshops on starting a research program, organizing a laboratory and other important issues.

Initiative 2.6. *Serve more students who are underrepresented/underserved (UR/US).*

Actions/outcomes:
The College student population exceeds the percentage of UR/US students in the University as a whole. We feel that we do an excellent job in serving our diverse population but there is always room for improvement. The College will collect data about UR/US students at CSUDH, analyze it against other comparable student databases, perform a literature search, and identify reasons why UR/US don't complete their degrees in a timely manner (there is much research in this field and key factors have already been identified). As part of the NBS speaker's series, we will invite prominent researchers in this field to address the faculty. These presentations along with our analysis will allow the College to develop a plan to better serve our students, retain and move them toward graduation.

In an effort to have more UR/US students apply to CSUDH, the College will engage in outreach to Community Colleges and high schools in our area. We have already made contacts with LA Harbor College and will do the same with other feeder colleges. When funding is available, we will continue to teach basic science courses in our feeder high schools to better prepare them in the sciences and inform them of opportunities available at our University.

Initiative 2.7. *Support interdisciplinary team teaching and research.*

Actions/outcomes:
Modern science provides an interdisciplinary opportunity for teaching and research and the College promotes interdisciplinary teaching, research and grant opportunities. We want to have increased team teaching of interdisciplinary courses, coordinated interdepartmental advising and development of interdisciplinary research teams.

An interdisciplinary approach to teaching and research is the modern approach and training our students to view the scientific world from this perspective will serve them well as they continue in their careers. Viewing our curriculum from an interdisciplinary approach will give a new perspective in the classroom and challenge students to think in new ways. We look forward to developing interdisciplinary programs, modeled after our MS in Environmental Science, which brings together faculty from several departments. As our faculty work together closely, research opportunities arise and further increase our chance to obtain additional external funds.

Initiative 2.8. *Increase access to academic programs.*

Actions/outcomes:
The College has increased its offering of on-line and hybrid courses with great success. Those sections often are the first to reach maximum enrollment and fit into the diverse schedules of our students. We plan to continue to provide on-line courses in high demand areas and to develop on-line programs. On-line programs could be offered through CEIE and thus increase revenue for the College to fund other initiatives.

Initiative 2.9. *Establish a "science center" to use for recruitment, outreach and teaching.*

Actions/outcomes:
The College envisions a Science Center that would be available for our classes as well as for high school and elementary students. We plan to explore sources of funding for the Center, find space and develop a plan for its use. The Center would bring visibility of the campus to the community, be a destination for K-12 field trips and provide job opportunities for our students.

Initiative 2.10. *Establish a showcase event to highlight faculty accomplishments*.

Actions/outcomes:
As Student Research Day highlights student accomplishments, the College will implement an event to highlight scholarly accomplishments of its faculty members. We will form an ad hoc

committee to plan event which will be a luncheon/dinner and seek sponsors. The event will feature at least two faculty members giving presentations on their research and scholarship.

Goal #3: Deliver a campus-wide enrollment management initiative that will identify and recruit future students and support their transition, retention and graduation

Intervention 3.1. *Increase scholarships/assistantships to recruit/retain students.*

Actions/outcomes:
College faculty will seek funding sources/sponsors for student scholarships/assistantships. Scholarships and assistantships are an attractive option for students and provide protected time for students to prepare for specific careers. They also provide support for students and reduce the time spent in outside employment thus contributing to the retention and graduation of students.

Intervention 3.2. *Work with student affairs to recruit from community colleges.*

Actions/outcomes:
Dean Hohm and various faculty members effectively worked with community colleges to recruit students to NBS. The College will continue this work to increase the flow of qualified students to our College. The Dean will invite community college faculty/administration to visit the college and in turn will visit the community colleges to form better working relations with their faculty and administration. All of these efforts will support the transfer of qualified students to our science departments.

Intervention 3.3. *Increase interaction between students and faculty.*

Actions/outcomes:
The College values faculty/student interaction through advising, in the classroom and through student participation in faculty research/scholarship. We are committed to continuing our successful attainment of external funds to support student/faculty research, presentation at conferences and publication in peer-reviewed journals. Student participation in faculty research prepares students for their careers, enhances their competiveness for entrance into top graduate and professional careers and facilitates the success of faculty research projects. The College will provide incentives for faculty who enroll students in independent study and provide WTUs for supervision of these students. These units will be bankable year to year.

We plan to continue Federal funding of NIH programs such as Minority Access to Research Careers (MARC) and Minority Biomedical Research Support (MBRS). Faculty members are also seeking other options through NSF and other Federal agencies.

Intervention 3.4. *Recruit international students.*

Actions/outcomes:
The College will develop a plan with CEIE to recruit international students to our science programs. We believe that international students provide an additional perspective and viewpoint and enhance the learning experience of all students.

Goal #4: Will be a model urban University that produces more graduates from under-represented in under-served communities with high quality degrees in comparison with all other comprehensive universities

Intervention 4.1. *Provide adequate college advising for majors.*

See Goal 2, Initiative 2.4

Initiative 4.2. *Develop and implement tracking system for college alumni.*

Actions/outcomes:
The College needs a system, and the personnel, to track our graduates and monitor their career choices. We are frequently asked for information as to how many of our graduates go on to doctoral programs or to professional school. At present, we have no way to do this systematically. It is a priority of the college to develop a tracking system and to obtain yearly updates on the success of our graduates. Not only do we want to learn what career they have chosen but we want to host a reception in their honor, have them on our advisory board, and ask them to help us recruit, advise and mentor current and future students.

Initiative 4.3. *Restore schedule to increase course variety both in times offered and in course selection.*

Actions/outcomes:
In order to graduate more underserved students with high quality degrees, the College must offer courses at times students are available and provide more on-line offerings. This was discussed under Goal 2, Initiative 2.8. We must relieve stress from course sections that are offered night or day only and only once per year. Increasing course offerings will increase student access and lead to retention and improved graduation rates.

Goal #5: Is California's leading academic institution where race, class, gender, sexuality and culture intersect with local and global knowledge, social and environmental responsibility and community justice.

Initiative 5.1. *Develop service learning opportunities in all areas but especially those in underserved communities*

Actions/outcomes:
College faculty members are involved in community based research and many have added service learning components to their courses. We want all departments/programs to incorporate service learning into their curricula and to provide credit to students for this service.

Initiative 5.2. *Support unique programs to capture social issues and problems*

Actions/outcomes
Sociology and Psychology capture social issues. This item was not fully developed…………

Initiative 5.3. *Provide programs and opportunities in environmental responsibility and justice.*

Actions/outcomes:
The College supports the Center for Urban Environmental Research (CUER) as the interdisciplinary home for environmental programs and activities. CUER conducts activities leading to environmental education from pre-college to the Ph.D., including both academic and non-academic organizations. The Center plans to maintain and build demonstration gardens for native plant species, invite students interested in the environment to apply to CSUDH, and become the destination campus for professional organizations, academic institutions and the community regarding environmental concerns. Faculty members in the CUER actively seek external funding to support its activities.

Initiative 5.4. *Provide CAMS students, as well as students in surrounding high schools, the opportunity to enroll in lower division college chemistry courses.*

Actions/outcomes:
Dean Hohm initiated the Science Opportunity Program by offering lower division science classes to 10th, 11th, and 12th grade students at CAMS. This was expanded to surrounding high schools where a limited number of chemistry courses were offered. Not only does this program serve to recruit students to CSUDH, it better prepares students for STEM fields regardless of which college they attend. We would like to continue these programs and explore offering additional joint programs with CAMS.

Initiative 5.5. *Build links with the community.*

Actions/outcomes:
The College will seek funding for both the Continue Urban Community Research Center and Center for Urban Environmental Research. We feel that programs in both of the Centers benefit our community and provide community-based research experiences for students. They also forge stronger links with the surrounding community and promote our campus.

Goal #6: Substantially increase revenues from private fundraising, partnerships, foundations and research grants to strengthen our ability to more effectively invest and allocate recourses to achieve success

Initiative 6.1. *Promote research by college faculty/students and build the research capacity of all departments.*

Actions/outcomes:
The College promotes research and the teacher/scholar model. We will hire faculty with research agendas and provide release time for faculty grant writing activities. We will work with the Office of Research and Funded Projects to provide grant writing workshops for faculty and to send them to Washington DC to meet with program officers. Each faculty member will develop a research plan and a time table to achieve their goals. When possible we will provide release time for faculty whose grants do not allow course release (NSF and others) so they can accomplish their research goals.

As a result of these efforts we expect an increase in research by faculty as demonstrated by an increased rate of publication as well as an improvement in the quality and impact of publications on their disciplines. Faculty will be further rewarded by increased revenue in their research stimulation accounts.

Goal #7: Engage our local communities to increase opportunities for students and faculty while positioning CSUDH as the University of choice throughout the South Bay region

Initiative 7.1. *Continue collaborations with the Los Angeles Biomedical Research Institute at the Harbor-UCLA Medical Center.*

Actions/outcomes:
The College will continue collaborations with the Los Angeles Biomedical Research Institute at the Harbor-UCLA Medical Center. Students from all of our majors, undergraduate and graduate, can gain a cutting-edge research experience at LA BioMed. The College will invite LA BioMed faculty to give presentations in seminar classes, to judge at Student Research Day and to continue their mentoring of MARC/MBRS students. Our interactions with them will result in continued research opportunities for students in the biomedical/behavioral sciences, student publications in scientific journals, and collaborations of our faculty with LA BioMed faculty.

A tabular representation of our Strategic Plan is presented below.

Strategic Plan – College of Natural and Behavioral Sciences

Initiatives/Actions/Outcomes determined at 5/4-5/5/10 strategic planning meetings

Goal #1: Provide outstanding academic programs that further strengthen our performance as a model comprehensive urban university

Initiatives	Actions	Outcomes
1.1 The College will hire new tenure-track faculty to support our programs and to maintain/strengthen quality, consistency and continuity in existing programs and in-demand/innovative programs within the College	Identify existing department and program needs as well as need for new programs. Complete departmental analysis by 11/2010. After analysis, commence the hiring of new faculty	Hire 42 new faculty over the next 5 years to support programs and provide research opportunities for students Achieve a better full-time/part-time ratio of faculty Reduction in number of temporary faculty
1.2 The college will support faculty/student research and scholarship	Reduce teaching load for full-time faculty conducting research/scholarship Seek funds to provide release-time	Three course release during AY (9 WTU) Release will increase quality, quantity and impact of grant activity, publication rates (papers and books), student research activities
1.3 Provide adequate resources for departments/programs	Restore assigned time to coordinators and chairs Provide assigned time for special initiatives to strengthen departments/programs	Chairs/Coordinators will receive the appropriate WTU based on program size (3-9 WTU) Services to students will increase including advising, providing general information, career advisement
1.4 Curriculum improvements to strengthen existing programs and support new programs important to California's growth	Develop/strengthen programs in the following areas: Energy, Biotechnology/Bioinformatics, Homeland Security, Mathematics, Engineering-related programs, Astronomy Complete offerings in ANT (archaeology, cultural, linguistic, biological, applied), Green Technology Provide resources to implement recently approved programs such as Health Psychology	Increased enrollment due to new programs More opportunities for students to enter the workforce Wider range of programs in NBS to meet educational and human resource needs of the community

Goal #2: Provide an excellent teaching and learning environment and achieve student access, persistence and success through graduation and beyond that matches the best urban comprehensive universities in the country

Initiatives	*Actions*	*Outcomes*
2.1 Provide targeted advising for students at all levels	Each program will create interactive website so faculty can communicate with students Provide on-line advising Provide 6 WTU for college pre-health coordinator Provide departmental advisors for summer and academic year and release time for effective advising Provide pre-teaching advisor (3 WTU) Provide college graduate school advisor Provide tutoring services	Students move through degree requirements (retention) and graduate in a timely manner Students have more contact with faculty Students complete requirements for health professions and are prepared to apply Track success of students to medical and graduate school With the increase in the number of STEM teacher training, we are responsible for advising pre-teachers who are pursuing biology degrees as well as in the biology part of the science option in Liberal Studies.
2.2 Support continued excellence in curriculum (teaching) so all students can achieve their potential	Provide development opportunities for new and continuing faculty Provide a faculty mentoring program Provide workshops on pedagogy	Faculty will have well developed course syllabi Faculty will have the opportunity to participate in two pedagogy workshops/yr to improve their skills
2.3 Serve more students who are underrepresented/underserved (UR/US)	Collect data about UR/US students, analyze against other comparable student databases Identify reasons why UR/US don't complete their degrees (invite will speakers who research this field) Engage in outreach to Community Colleges and high schools in our area Provide mentoring for UR/US students	Increased interest of UR/US students in our programs Increase graduation rates for UR/US students
2.4 Support interdisciplinary team teaching and research	Determine logistics for interdisciplinary teach teaching Coordinated interdepartmental	Team taught courses are offered Interdisciplinary proposals

Initiatives	Actions	Outcomes
	advising

Seek interdisciplinary research and grant opportunities | are submitted

Interdisciplinary mentoring of students |
| 2.5 Increase access to academic programs | Provide on-line courses in high demand areas

Develop on-line programs | Courses are available to more students and fit with their diverse schedules |
| 2.6 Establish a "science center" to use for recruitment, outreach and teaching (environment, ecology, astronomy) | Explore sources of funding
Develop plan for the center

Find space for the center | More campus visibility to community
Place for K-12 field trips
Job opportunities for students
Can be used by SOE |
| 2.7 Obtain new science building including research laboratories for faculty and students | Seek funding for new building

Undertake detailed planning/building design exercise in conjunction with facilities planning and construction management | Construction of building expedited

Up-to-date new facility will be competitive with science buildings on other CSU campuses

New facility will attract students and facilitate modern curriculum |
| 2.8 Improve quality of instructional equipment, laboratories and faculty offices to meet or exceed CSU standards | Seek funds to replace outdated/broken/unsafe equipment/furniture with cutting-edge instructional equipment

Work with Division of Administration and Finance to develop plan to modernize facilities in all departments

Provide training for staff and faculty on equipment use | Better environment for students
Better learning by students
Departments more attractive to students |
| 2.9 Restore operating expenses for departments to support a modern curriculum | Determine current needs for each department/program including staff support and operating expense | Adequate supplies to serve students

Adequate materials for laboratories |
| 2.10 Establish a showcase event to highlight faculty accomplishments | Form ad hoc committee to plan event

Seek sponsor for event

Schedule event | Recognition and appreciation for faculty accomplishments |

Goal #3: Deliver a campus-wide enrollment management initiative that will identify and recruit future students and support their transition, retention and graduation

Initiatives	Actions	Outcomes
3.1 Increase scholarships/assistantships to recruit/retain students	Work with UA to seek funding sources/sponsors for student scholarships/assistantships	Support will be provided for students

	Apply for federal grants to support students	Targeted funds from federal grants will provide protected time for students to prepare for specific careers Students will be retained and graduate in a timely manner
3.2 Work with student affairs to recruit from community colleges	Dean/faculty/students will attend recruitment events at community colleges Invite community college faculty/administration to visit the college	Increased enrollment in our science departments Better working relations with faculty/administration at community colleges
3.3 Increase interaction between students and faculty	Seek external funds to support student/faculty research, presentation at conferences and publication in peer-reviewed journals. Continue programs such as NIH MARC and MBRS and Dept. of Ed. McNair Program	Increased retention of students in the major Increased success of students entering the workforce and/or continuing to graduate/professional programs Increased graduate rates of students in the sciences
3.4 Recruit international students	Develop plan with CEIE to recruit international students to our science programs	International students will provide an additional perspective and viewpoint to our programs

Goal #4: Will be a model urban University that produces more graduates from under-represented in under-served communities with high quality degrees in comparison with all other comprehensive universities

Initiatives	*Actions*	*Outcomes*
4.1 Provide adequate college advising for majors	See Goal 2, Initiative 1	
4.2 Develop and implement tracking system for college alumni	Develop tracking system Contact alumni yearly to update their status Host reception of alumni Include alumni on college advisory board	Alumni as resource for recruitment, advising, mentoring Will create database of alumni successes to be used for institution baseline data required for federal grants
4.3 Increase interaction between students and faculty	See Goal 3, Initiative 3.3	
4.4 Restore schedule to increase course variety both in times offered and in course selection	Relieve stress from course sections that are offered night or day only and only once per year	Increased access to students Increased retention and graduation rates

	Increase the number of course sections to adequately meet student need	

Goal #5: Is California's leading academic institution where race, class, gender, sexuality and culture intersect with local and global knowledge, social and environmental responsibility and community justice.

Initiatives	*Actions*	*Outcomes*
5.1 Develop service learning opportunities in all programs especially those in underserved communities	Add service learning courses to curriculum in all departments/programs Solve any liability issues	Credit for service learning More hands-on experience for students including foreign experience
5.2 Support unique programs to capture social issues and problems	Support visual technology	Graduate students with interest in this aspect of social science
5.3 Provide programs and opportunities in environmental responsibility and justice	Support the Center for Urban Environmental Research (CUER) as the interdisciplinary home for environmental programs and activities Maintain and build demonstrations gardens for native plant species Conduct activities leading to environmental education from pre-college to the Ph.D., including both academic and non-academic organizations Invite students interested in the environment to apply to CSUDH	CSU Dominguez Hills will be a destination campus for professional organizations, academic institutions and the community regarding environmental concerns
5.4 Provide CAMS students, as well as students in surrounding high schools, the opportunity to enroll in lower division college chemistry courses	Offer lower division classes to 10th, 11th, and 12th grade students Explore offering joint programs with CAMS	Increase number of qualified and prepared new students in the sciences at CSUDH
5.5 Build links with the community	Continue Urban Community Research Center Continue Center for Urban Environmental Research Seek funding for both Centers Develop programs benefiting the community Provide community-based and international anthropology research experiences for undergraduates	Stronger links with the community Increased opportunities for students to serve their communities

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<td colspan="3">Goal #6: Substantially increase revenues from private fundraising, partnerships, foundations and research grants to strengthen our ability to more effectively invest and allocate recourses to achieve success</td>
</tr>
<tr>
<td>Initiatives</td>
<td>Actions</td>
<td>Outcomes</td>
</tr>
<tr>
<td>6.1 Promote research by college faculty/students and build the research capacity of all departments</td>
<td>Hire faculty with research agendas

Provide release time through the college for faculty grant writing activities

Work with RFP to provide grant writing workshops

Develop research plan for individual faculty and provide resources to accomplish that plan

Event to recognize faculty/student research accomplishments

Provide release time for faculty whose grants do not allow course release (NSF and others)</td>
<td>Increased research by faculty

Increase rate, quality and impact of publications

Increase in faculty/student authorship

Increase in conference presentations

Increase in research stimulation accounts</td>
</tr>
<tr>
<td>6.2 Stimulate faculty mentoring of research students</td>
<td>Provide incentives for faculty
  The WTUs for teaching supervision classes
  are to be granted to the faculty who are
  doing the supervision. (These units are
  bankable year-to-year.)

Provide workshops on effective mentoring

Evaluate mentoring activities</td>
<td>Increased faculty involvement in mentoring of research students

Guidelines/handbook for research mentoring</td>
</tr>
<tr>
<td colspan="3">Goal #7: Engage our local communities to increase opportunities for students and faculty while positioning CSUDH as the University of choice throughout the South Bay region</td>
</tr>
<tr>
<td>Initiatives</td>
<td>Actions</td>
<td>Outcomes</td>
</tr>
<tr>
<td>Continue collaborations with the Los Angeles Biomedical Research Institute at the Harbor-UCLA Medical Center</td>
<td>Invite LA BioMed faculty to give presentations in seminar classes

Invite LA BioMed faculty to judge at Student Research Day

Continue LA BioMed faculty as mentors for MARC/MBRS students</td>
<td>Increased research opportunities for students in the biomedical/behavioral sciences

Student publications resulting from their research

Collaborations of faculty with LA BioMed faculty</td>
</tr>
</table>

CAMS/area high schools project	See initiative 5.5	
Promote local opportunities to enhance student success	Coordinator to promote and submit student applications to CSU pre-doctoral scholar and CDIP programs	Increased recognition of CSUDH students by local CSU campuses and Chancellor's Office Increased student support for graduate school application process Funding for graduate school expenses Grow faculty to teach in the CSU

Goal #8: Systematically improve the quality and cost effectiveness of administrative services to strengthen academic programs and student services		
Initiatives	*Actions*	*Outcomes*
Not applicable to AA		

Initiatives from planning meetings 5/4-5/5/10
Goals under which initiatives may fit are listed beside each initiative.
Research
- **The college will support faculty/student research/scholarship (Goals 1, 2, 6)**
- **Faculty provide continuous research/scholarship opportunities for students (Goals 1, 2, 3, 4, 5, 6, 7)**
- **Promote research by college faculty and build the research capacity of all departments (Goals 1, 6)**
    - **Provide resources for grant writing**
    - **Seek support from Federal student training programs (NIH, NSF and others)**
    - **Support Student Research Day**
    - **Recognize faculty/student research accomplishments**
- **Support interdisciplinary team teaching and research (Goals 1,2,5,6)**
- **Promote research by college faculty/students and build the research capacity of all departments (Goal 6)**

Programs
- **College will support development of new programs (Goals 1, 2)**
- **Hire new faculty to support our programs and to maintain and strengthen quality, consistency and continuity in existing programs and in-demand/innovative programs in the College (Goals 1, 2, 5)**
- **Support continued excellence in curriculum (teaching) so all students can achieve their potential (Goals 1, 2, 4, 5, 6)**
- **Support accreditation of programs (Goals 1, 2, 5)**

Resources

- **Restoring adequate resources for programs (Goals 1, 2, 5, 6, 3)**
  - Provide release time for graduate coordinators
    - Coordinator can devote time to their programs
    - Provide services to students including advising
  - Provide adequate administrative support
    - Keep offices open when students are here
    - Attend to student needs (advising holds, making appts with faculty, providing information etc)
- **Provide adequate administrative support for departments and students (Goal 3)**
- **Upgrade and sustain databases that support quality of programs and delivery of programs/information infrastructure (Goals 1, 2, 7)**

Faculty

- **Provide faculty development for new and continuing faculty (Goals 1, 2, 4, 5)**
  - Workshops for junior faculty on college expectations
    - RTP
    - Teaching
  - Grant writing workshops
    - More grants submitted and awarded

Students

- **Provide targeted advising excellent/personalized advising for students at all levels (Goals 2, 3, 4)**
  - Programs create interactive website so faculty and communicate with students
  - Provide on line advising
    - Students progress to degree (are retained) and graduate in a timely manner
    - Students are retained because they have more contact with faculty
- **Sustain number of students that are underrepresented/underserved**
  - Collect data, analyze against other comparable students baseline

- **Community engagement with students/field experiences (Goals 1, 2, 3, 4, 5, 7)**
  - Work with community to improve quality of students coming to the college (math/science teachers)
- **Explore teaching strategies**
- **Support and promote variety of modes of instruction appropriate to the disciplines (Goals 1, 2, 5, 6)**
  - Support field experiences
- **The continuous updating of courses both in terms of content and way of delivery (Goals 1, 2, 4, 5)**
- **Support GE in the NBS for all students (Goals 1, 2, 4)**
- **Provide integrative science instruction for all students (Goals 1, 2, 3, 5)**
- **Cutting edge teaching technology (Goals 2, 6)**
- **Provide individualized attention for students**
- **Work with community to improve quality of students, improve preparation and recruitment of students (Goals 3, 4, 5)**

Facilities

- **Upgrade facilities, equipment, and provide lab space for all departments/programs within the college (Goals 1, 2, 4, 6)**
     - **Actions-soc needs small group labs**

<u>Relations</u>
- **Build strong relations with community colleges/high schools to facilitate student pipeline (Goal 7)**
     - **Visits to CC by dean/faculty (Harbor already established)**
          - **Increase transfer of students to CSUDH**

<u>Sustainable resources</u>
- **Encourage sustainable /environmental activities and programs (Goals 4, 6, 3,1, 2)**

<u>Advancement</u>
- **Work with alumni relations to establish connections with our students so they can be mentors, help students**
- **Build and sustain a database of alumni (Goals 1, 3, 5, 6, 7)**
- **Develop relationship with UA for fundraising (Goal 6)**
     - **Release time for faculty to work on fundraising**