May 14, 2001

SIXTH COLLEGE – DETAILED ACADEMIC PLAN

Table of Contents

Sixth College Detailed Academic Plan

I. Sixth College Theme

The Sixth College theme, Culture, Art and Technology, embraces the exploration of interactions among the three. Culture has been called "the human adaptation," that aspect of ourselves that makes life as human beings possible. Culture finds material expression through art and technology. Sixth College will help students to see their own and other cultures not as givens, but as products of this synergistic interplay amongst art, technology and the human adaptation.

Art is fundamental to society, positing challenging visions of the past, present and future, while at the same time functioning as a mirror of culture and of the individual psyche. Artistic expressions symbolize both individuality and membership in diverse social formations, providing fertile ground for understanding values, beliefs and character. The arts have always used technology as a tool and with those tools have explored integrated perspectives on the interactions between technology and society. Understanding technology and the impact of technological processes and mechanisms constitutes a vital aspect of the critical examination of existing notions of reality, culture, truth, and ethical behavior. An exploration of these interrelationships between culture, art and technology requires interdisciplinary and intercultural approaches. Hence, the Sixth College theme provides an ideal intellectual and artistic framework for a contemporary liberal arts education.

The theme of Sixth College was motivated by the rich intellectual challenges inherent in the intersection of technology, culture and the arts. The academic plan exploits the college theme to create a curriculum that will prepare students for a future that demands ethical integrity; team-work skills; ability to adapt to rapid change; aptitude to think abstractly; the competence to acquire, process, and evaluate new information critically; and the proficiency to communicate across disciplinary boundaries. To achieve this goal, Sixth College will create a learning environment, both inside and outside the classroom, that will emphasize collaborative learning, pattern recognition, deductive reasoning and creative imagination and the ability to hypothesize, interpret, and express thoughts and ideas through the effective use of communication tools that include the digital medium. Sixth College will provide the skills necessary for lifelong learning, including information and computer literacy, paired with the crucial ability to seek out and learn from experts.

The Sixth College Faculty Planning Committee was guided by recommendations made by the previous Sixth College Planning Committee, which strongly advocated the creation of a curriculum that will develop communication, team-working and computer skills, and that expects students to apply classroom knowledge outside the classroom.

II. Academic Plan

The Faculty Planning Committee agreed that Sixth College students should be educated in all three areas of the college theme, both in the core sequence and in the breadth requirements. The Sixth College general education requirements are identical for students in all majors. As detailed below, the general education requirements include: (1) a core sequence based on "Culture, Art and Technology," with an associated course on computer literacy in the first quarter, and intensive instruction in composition and information literacy in the second and third quarters, (2) breadth requirements, and (3) an upper-division practicum, with an adjunct communication class.

A. Freshman Core Sequence

All students will take a three-quarter core sequence titled Culture, Art and Technology (CAT). CAT is a highly interdisciplinary sequence integrating learning in arts and humanities, social sciences, and science and engineering. It introduces students to thinking across disciplines so they can identify interactions, recognize patterns and provide opportunities for learning by inquiry in a collaborative environment. Exercises and instruction that develop computer and information literacy as well as writing and communication skills will be embedded in the core sequence.

Sixth College is committed to the use of Internet and multimedia technologies and electronic classroom communication systems to create an "active learning" environment and to enhance and enrich classroom learning and teaching. The first two courses of the core sequence will introduce "project-based learning" approaches to prepare for the intensive teamwork projects of the last quarter of the core. Technology will facilitate this process as a communication tool for presenting complex simulations and visual materials. See *Appendix 9* for a brief description of the role of instructional technology.

1. First Quarter:

CAT 1, Nature and Culture (Evolution of Culture), (4 units)
The first quarter will introduce a global historical overview of the general principles and patterns of past human development, examining the causes and consequences of cultural variations spanning the last 13,000 years of human history. The interactions of continental environments (geography, climate, biological resources) with internal and external social forces on cultural development will be explored.

Forces that enabled, shaped, and promoted key hallmarks of cultural changes and evolution will be studied: technology (e.g. transportation, weapons), agriculture (food production, animal domestication), writing, and political organization. The arts will be examined as agents of change and the media to disclose, communicate, and debate values, modes of thought, societal norms, and structures of feelings.

Computers Demystified (2 units)
Students will complete one two-unit course, Computers Demystified, developed in collaboration with the Department of Computer Science and Engineering. This requirement

will be waived for students who take an alternate approved computers course before taking the third quarter of the Sixth College core sequence.

2. Second Quarter:

CAT 2, Case Studies (Agents of Change), (6 units)
A fundamental shift in understanding in one area of knowledge can have a profound impact on cultures as a whole. Often these shifts are linked to significant convergences between the arts and technologies. The second quarter will study such convergences as key historical events that revolutionized ways of inhabiting the world.

This course is not a survey; it will emphasize specific examples of those cultural epiphanies that had the broadest impact on multiple cultural dimensions, examining them from both aesthetic and technological points of view. For example, one topic that might be examined is perspective geometry – which resulted in new styles of painting, architecture and scenic design, navigation, and the ability to measure at a distance and map the world. Other topical examples are: the pyramids, the development of time measurement, gunpowder, the printing press, the discovery of electricity, recording devices (images, data, and sound), and the Internet.

Composition
This course includes intensive instruction in university-level writing and composition; sections on information literacy taught by UCSD librarians are also featured.

3. Third Quarter:

CAT 3, Working Forward (Creating the Future), (6 units)
Through the incorporation of projects, the third quarter challenges students to engage in the processes of apprehending the future, thinking creatively, engaging in teamwork, and communicating their thoughts. It will do this by requiring them to work on projects that incorporate technological and artistic innovations in a coherent way.

Students will examine contemporary ideas and technologies that show promise of becoming agents of change in the future. The prior two quarters of the CAT sequence will enable students to critically assess both the processes and results of hypothetical scenarios.

The course will feature a selected group of guest lecturers chosen from a broad range of disciplines, including but not limited to, information technology, genetics, visual and performing arts, science fiction, economics, and ethics, and who represent cutting-edge ideas, developments, and possibilities in their respective fields.

Composition
This course includes intensive instruction in university-level writing and composition; sections on information literacy taught by UCSD librarians are also featured.

Appendix 3 contains further description of the core sequence and a short reading list for each quarter. Highlighted are possible key references. Additional reference literature representative of the academic content of each of the three quarters are included. The short and tentative bibliography will help guide the core sequence faculty instructors in designing the course syllabi.

B. Breadth Requirements

The Sixth College breadth requirements have three primary goals: (1) to produce breadth of knowledge and connections across that breadth, (2) to encourage creative imagination, and (3) to accomplish these activities from an ethically informed perspective. The aim is to allow students to discover the richness of UCSD's academic life and to see relationships among the sciences, social sciences, engineering, arts and the humanities. Because Sixth College emphasizes cross-disciplinary ways of thinking, it is critical for students to appreciate the different modes of inquiry within academic disciplines. To make this connection clear, the breadth requirements are presented around themes of knowledge acquisition rather than as courses within specific academic areas.

The breadth requirements conform to Academic Senate Regulations for college general education requirements. (*See Appendix 1.*) In addition, two of the courses in the breadth requirements must have a significant writing component. Requirements and course examples are in *Appendix 4*.

Breadth Requirements Thematic Categories:

1. Methods, Practice and Modes of Inquiry

Students will familiarize themselves with the different modes of acquisition, production and organization of knowledge across academic disciplines to foster interdisciplinary understanding and communication. To achieve that, students will take eight 4-unit courses to be chosen from: Arts and Humanities, Social Sciences and Sciences, Biology and Engineering. Course requirements, which may be selected from lower- or upper-division courses, are described in four subcategories. Courses taken to satisfy major requirements may be applied to the breadth requirements if included on the list approved by the Provost's Office.

a. **Interdisciplinary Inquiry** - Interdisciplinary inquiry is a fundamental mode of scholarly activity. Covering all areas of academic and non-academic fields, it involves synergies of different specialties by putting a scientific, artistic, cultural or societal issue into a broader perspective. Problems are viewed not as entities that have finite boundaries and only one right answer but as multidimensional inquiries. Courses in this category provoke a mode of thinking that is fundamental in today's world where people are required to deal with complex and often ambiguous information, where people have to be generalists as well as specialists, and where people have to recognize patterns within a "sea of information." Students will take two 4-unit courses that cover two or more different academic fields selected from a list approved by the Provost's Office. At least one course

must be in the sciences or engineering.

b. **Narrative, Aesthetic and Historical Reasoning** – Narrative, aesthetic & historical reasoning captures human endeavor primarily as reflected in the arts, literature and history. Courses in this category introduce students to modes of investigation that identify and describe chains of events and their proximate and ultimate causes via observation, comparison and *natural experiments*, and that use aesthetics as a method of describing and explaining artistic phenomena and their societal relevance. Students will take two 4-unit courses that cover two or more different academic fields selected from a list approved by the Provost's Office. At least one course must be in the arts and humanities.

Foreign Language – Although Sixth College students will not be required to take course work in foreign language, language study will be encouraged, and students will be able to take foreign language courses to satisfy their general education requirements in this category.

c. **Analytic Methodologies/Scientific Method** – Analytical methodologies introduce students to the hypothetico-deductive approach that follows in general a sequence of observations, questions, hypotheses, predictions, testing of predictions and ultimately developing a theory. Also called the scientific method, this mode of inquiry is an interplay of inductive and deductive reasoning. Courses in this category have a strong analytic component including quantitative and experimental methodology. Students will take two 4-unit courses selected from a list approved by the Provost's Office.

d. **Structured Reasoning** – Courses in this category will provide an introduction to the methodology used to form abstract models of "real world" problems. Students will learn how to reduce complex problems to a series of core issues and to develop a formal structure for then analyzing the core issues. Appropriate courses taught in the Departments of Philosophy, Computer Science and Engineering, Linguistics, and Mathematics will satisfy this requirement. An approved list of courses that will fulfill the Structured Reasoning Requirement will be developed by the Sixth College Curriculum Committee in collaboration with the academic departments.

2. Understanding Data

All Sixth College students will be required to fulfill this requirement. Sixth College, in collaboration with academic departments, will develop a 4-unit non-calculus based lower-division statistics course: Understanding Data *(see Appendix 5)*. This required course can be replaced (by petition) with another discipline-specific course offered by UCSD.

Sixth College XX, Understanding Data (4 units)

The purpose of this course is to introduce students to the ways in which data can be used to further our understanding of natural and social realities. The course will cover three broad topics: (1) the ways in which data can be represented and summarized in order to understand both the signal and the noise in a set of data; (2) the ways in which data can be utilized to distinguish signal from noise, including the basic logic of hypothesis testing; and (3) the

principles of data collection (experimental design) that allow collection of new data in such a way as to maximize the resulting signal.

3. Societal Contexts

Courses in Societal Contexts provide the academic environment in which to examine how differences in gender, ethnicity, socio-economic and cultural identities, and religious and ethical beliefs create social contexts.

a. **Social Context** – Courses in this category will help students establish cultural competency, a sense of social breadth, and the knowledge and sensitivity of diversity. Students will take one 4-unit course in ethnic or gender studies, selected from a list approved by the Provost's Office. Courses taken to satisfy major requirements may be applied.

b. **Ethical Context** – Courses in this category will help students to place science, technology and cultural inquiry into an ethical context; they aid in the understanding of values and behavior and their social implications. Students will take one 4-unit course in ethics or religion from a list approved by the Provost's Office. Courses taken to satisfy major requirements may be applied.

4. Art Making

The required courses in Art Making will expose the students to practical experience in at least two artistic genres, enhancing their understanding of creative processes.

Students will take two 4-unit courses in art making from two different departments chosen from a list approved by the Provost's Office. Courses taken to satisfy major requirements may be applied.

C. Upper-Division Practicum

As described below, students may elect to follow one of three options to complete the upper-division practicum:

Option A (2-4 units)	**Option B** (no credit)	**Option C** (4 units)
A course or academic internship offered by an academic department or program, selected from a list approved by the Sixth College Upper-division Practicum Advisory Committee	A project or experience outside the university, approved of by Sixth College Upper-division Practicum Advisory Committee	Sixth College Practicum
Sixth College Communication (2 units)	Sixth College Communication (2 units)	Sixth College Communication (2 units)

1. Description of the Upper-division Practicum

The objective of the practicum is to provide students with the opportunity to integrate ideas and methods learned while pursuing the undergraduate curriculum. The practicum must contain content from, and address explicitly, interactions involving at least two of the three areas of culture, art and technology. The upper-division practicum has two components: (1) a project that must involve a student in the creative process, and (2) a 2-unit course, Sixth College Practicum, in which the project or experience is communicated. (See: Practicum Communication Requirement below.) Ideally, the project will be of a collaborative nature.

The project that forms the basis of the practicum can be completed via three different routes. A student can take a project-oriented course offered by the university–such as Independent Research–for academic credit (Option A). The project may also be completed without academic credit through activities and/or work outside the university, via an internship or community service activity (Option B). In this case, academic credit for the practicum will be received only for the 2-unit communication requirement.

There may be students who do not have an opportunity to engage in an appropriate project, either in a course or outside the classroom. For those students, Sixth College will offer a course (Option C) designed to provide them the opportunity to participate in the execution of a project. In this course, students will be placed on interdisciplinary teams, and each team will be given an assignment that fulfills the intent of the requirement. The course will carry four units. It may be taken during the junior or senior year. It is anticipated that only a small fraction of the Sixth College Students will select this option.

The selected project must be completed prior to taking the 2-unit communication course. Examples of projects and courses that will satisfy the first component of the practicum requirement are in *Appendix 6.*

2. Practicum Communication Requirement – Sixth College Communication (2 units)

All students must enroll in Sixth College Communication for two units to fulfill the second component of the practicum requirement. In this course the project must be presented so that an educated lay person can understand its purpose and outcome. In addition, the communication component should be an expression of the student's reflection about the project, not merely a reporting of activities or results. Students are expected to select presentation formats/media that include artistic/aesthetic forms of communication. Sixth College will accept many diverse presentation avenues, including creation of a website, a performance, a lecture, a piece of art, the design of an instructional unit, etc.

Some examples are listed in *Appendix 6* to illustrate the characteristics of classes and projects that will be seen as fulfilling the objectives of the requirement. These examples represent only some of the ways that a student may elect to satisfy the practicum requirement. Before beginning the practicum, students must seek approval of their projects from the Practicum Advisory Committee.

3. Practicum Evaluation

The 2-unit Sixth College Communication course will be graded on a P/NP basis. Guidelines to help define what will constitute a passing grade in the communication course will be developed at a later date.

D. Sixth College Co-curricular and Extracurricular Experiences

To supplement its basic curriculum, Sixth College will offer students a number of co-curricular and extracurricular experiences. These will be developed when the Sixth College support staff has been hired and will include: minors, honors seminars, book clubs, community outreach, student council, and cultural events offered to the San Diego community at large.

E. Sixth College Educational Environment

1. **Diversity**

   One of Sixth College's explicit goals is to create an environment that will attract students from historically underrepresented groups. Efforts to ensure students' academic success and personal development are most effective when the educational process encompasses the whole context in which students learn and live. Sixth College will actively create a community that fosters social and academic bonds. Sixth College will take a comprehensive approach to increasing student success by providing academic enrichment, personal support, and practical experience. Sixth College will seek collaboration with other UCSD student and staff associations to co-sponsor multicultural events and will actively promote and support outreach by participating in Community Outreach and Mentor Program activities. Students will be encouraged to fulfill practicum requirements in mentorships and outreach programs relevant to these goals.

2. **Technology**

   Sixth College will use evolving, cutting-edge technology to support the creation of a rich and stimulating artistic and intellectual environment in which the college community of learners can flourish. We will create an educational infrastructure that becomes the means for broadening and deepening the educational experience of students and for enhancing and extending the educational experience of alumni. Our undergraduate students will acquire the knowledge and skills that will enable them to continue to participate as members of our learning community long after their graduation.

   A fundamental underpinning of the Sixth College philosophy is to create a sense of students' connectedness to the college, to UCSD and the community at large by creating a virtual society. For example, we will create "Study Rooms" that will each include a series of short video-streamed lectures. The user will be able to watch and listen to a professor's lectures in any order, and each lecture will feature visual images, outlines, and charts to enrich the user's understanding and enjoyment. Along with the illustrated

lectures, the study room will link students to an array of web sites selected by the faculty as sources of additional information. Each room will have a reference section, with an annotated list of suggested books, articles, journals, films, and other ancillaries prepared by the faculty.

Students will have exhibition, performance and Internet spaces to showcase their creative activities. Internet technologies will allow current and former students to participate in the dialogue on concepts central to the academic and residential life of Sixth College.

We will provide a forum for people to participate in live dialogues. For example, the guest speakers of the third-quarter core sequence will present "cutting-edge" ideas, trends, and technologies (drawn from a broad spectrum of areas, including the arts, technology, economics, science, etc.) that have the potential to revolutionize our cultural norms, behavior, and interactions, and to question humanity's sense of identity and meaning. Because those topics will potentially attract a wide audience, we will broadcast the lectures over the Internet and will broaden the impact by providing a forum for live dialogs on the web.

F. Sixth College Partners and Collaborators

The College will work closely with academic departments, research units, and the UCSD Libraries to develop mutually beneficial programs. For example, the library will become an active partner in the Sixth College curriculum. In its role as a portal of information and knowledge, the library will be a key player to facilitate student access to information, teach students how to evaluate the value of data retrieved, and to understand the concept and ethical use of intellectual property.

Moreover, Sixth College is a partner of the emerging California Institute for Telecommunication and Information Technology (Cal (IT)^2). Sixth College is committed to pioneer meaningful application of evolving technologies inside and outside the classroom. For example wireless communication technology will be incorporated into the very design of this college's physical infrastructure and curricular planning, allowing Sixth College to pioneer radically new teaching, communication, community, and life-long learning paradigms. The distinction between "in the classroom" and "in the field" will be blurred, thus providing a comprehensive learning environment. Students will *learn* about technology, *use* it in and outside the classroom, and *provide feedback* to Cal (IT)^2 researchers about areas requiring additional research/development. The Sixth College upper-division practicum will also benefit from this partnership because the institute as well as the industrial partners will provide research and internship opportunities.

The Center for Research in Computing and the Arts (CRCA), the San Diego Supercomputer Center (SDSC), and the Visual Computing Laboratory are committed to participating and contributing to many aspects of the academic life of Sixth College. Collaborative interactions have started with the departments of Anthropology, Communication, Computer Science & Engineering, Ethnic Studies, Mechanical and Aerospace Engineering, and Structural Engineering. *[Letters of support are included; please see Appendix 11.]*

III. Summary of Sixth College Graduation Requirements

Graduation requirements are stated briefly below, following the format used in the Academic Senate Regulations for UCSD's other five colleges. For detailed information on each of the proposed general education requirements, see Appendices as indicated.

A. Degrees

Sixth College will recommend candidates for the degree of Bachelor of Arts or Bachelor of Science, with designation as to major. Double majors will be permitted, consonant with regulations of the Committee on Educational Policy (CEP).

B. General Education Requirements

See Table B, "Sixth College Graduation Requirements and Those of Other UCSD Colleges" in *Appendix 2*.

C. Additional Graduation Requirements

1. The minimum requirement for graduation with the degrees of Bachelor of Arts or Bachelor of Science will be completion of 180 units with a cumulative grade point average of 2.0 (C) or higher. At least 60 of these units must be completed at the upper-division level.

2. At least nine of the last eleven courses passed (or 36 of the last 44 units passed) must be taken as a Sixth College student.

3. A departmental or interdisciplinary major must be completed.

IV. Transfer Students

Throughout our deliberations on the development of the Sixth College academic plan, the committee has remained mindful of the importance of transfer students in the college and the need to create a curriculum that is transfer-student friendly. In large part, the decision to encourage foreign language study rather than require it was made in response to the concern that a language requirement would discourage transfer student enrollment.

We currently favor the recommendation of the previous Sixth College Planning Committee that the College should develop one required four-unit upper-division course explicitly for transfer students. This course would integrate writing and communication skills into selected thematic material presented in the first two quarters of the core freshman sequence (CAT). We believe that the advantages of requiring such a course outweigh the disadvantages. Transfer students would enroll in this course preferably during their first quarter at UCSD. The course would enhance and develop writing skills developed at the community colleges, would provide a unifying experience, and would help to integrate transfer students into the curricular and extra-curricular life of the College.

A decision concerning the possible acceptance of the Intersegmental General Education Transfer Curriculum (IGETC) will be made in consultation with the Sixth College faculty, taking into consideration the recommendation of the 1999 Senate-Administration Task Force to Study Transfer Student Issues that Sixth College should accept IGETC in fulfillment of the College's lower division general education requirements.

Upper-Division Practicum – The previous planning committee recommended that transfer students be permitted to satisfy the six-unit upper-division practicum requirement by enrolling instead in the third quarter course of the freshman core sequence. Transfer students could then be involved, at least minimally, in the College theme and would likely add considerably to the freshman third-quarter experience with their maturity and educational experience. We concluded that transfer students should have an option of taking either the third quarter course of the CAT sequence, or the Upper-Division Practicum.

As has been the practice in the curriculum planning of previous colleges, the detailed curriculum and policies for transfer students will be fully developed in the next phase of college planning. We anticipate that the transfer student curriculum and policies will submitted for Senate review during Fall 2001 and will be established and in place before the initial class of transfer students applies to Sixth College during Fall 2003 for entrance in Fall 2004.

Submitted by the Sixth College Steering Committee:

Gabriele Wienhausen, Sixth College Provost
Francine Berman, Department of Computer Science & Engineering
Geoffrey Bowker, Department of Communication
Daniel Dubin, Department of Physics
Louis Hock, Department of Visual Arts
Anne Hoger, Department of Mechanical & Aerospace Engineering
Jorge Huerta, Department of Theatre & Dance
George Lewis, Department of Music
David Luft, Department of History
James Moore, Department of Anthropology
Richard Moore, Department of Music
Marta Sanchez, Department of Literature
Doc Khaleghi, Undergraduate Student Representative
Lana Kreidie, Undergraduate Student Representative
Stephanie Little, Undergraduate Student Representative
Julie Paige, Undergraduate Student Representative

**Appendix 1: Conformity to Academic Senate Regulations
for College General Education Requirements**

(1.) Minimum Number of Courses

<u>CEP</u>: At least 14 courses for B.A. and B.S. degrees in the arts and sciences and 12 courses for B.S. degrees in engineering will be required in a college's general education graduation requirement. These will be four-unit quarter courses.

<u>Sixth College</u>: For all degree programs 17 to 18[*] courses will be required for general education. The total number of courses required will vary if a student's major requires a statistics course that may substituted for the Understanding Data requirement.

** -- a 17- unit program would include an upper-division practicum project that does not carry
    academic credit. An 18-unit program allows for a 4-unit practicum project.*

(2.) Limits on Overlapping

<u>CEP</u>: For B.A. and B.S. degrees in arts and sciences, at least 11 of the general education courses must lie outside the requirements specified by one of the student's major departments or programs. For B.S. degrees in engineering, at least nine of the 12 courses must lie outside the major requirements.

<u>Sixth College</u>: (same) For B.A. and B.S. degrees in arts and sciences, at least 11 of the general education courses must lie outside the requirements specified by one of the student's major departments or programs. For B.S. degrees in engineering, at least nine of the general education courses must lie outside the major requirements.

(3.) Breadth Requirement

<u>CEP</u>: For B.A. and B.S. degrees in arts and sciences at least 11 of the 14 general education courses, and for B.S. degrees in engineering nine of the 12, must be taken from a minimum of four departments or programs. Courses required by the student's major department or program will not count toward this breadth requirement. The writing program sequence will count as one area outside the student's major department toward fulfilling this requirement. Each Provost's office will be responsible for monitoring the spirit of this requirement as well as technical compliance with it. All colleges at UCSD must require graduates to meet minimal requirements in Humanities/Fine Arts, in Social Sciences, and in Mathematics/Natural Sciences.

<u>Sixth College</u>: Students in all degree programs will necessarily distribute their general education course work among the following departments and/or programs:

Humanities: At least one course in Interdisciplinary Inquiry, one course in either Social Context, Ethical Context, and one course in Art Making could come from Humanities departments.

Fine Arts: At least one course in Narrative, Aesthetic & Historical Reasoning, and one course in Art Making could come from Fine Arts departments.

Social Sciences: At least one course in Interdisciplinary Inquiry, one course in Analytic Methodologies, one course in Narrative, Aesthetic & Historical Reasoning and one course in either Social Context or Ethical Context could come from Social Science departments. A statistics course could also be taken through a Social Science department, in lieu of Sixth College XX, Understanding Data

Mathematics, Science and Engineering: At least one course in Interdisciplinary Inquiry, one course in Analytic Methodologies, and one course in statistics (in lieu of Exploring Data) could come from these departments.

(4.) Writing Requirement

CEP: At least five courses (including general education course and courses in the major) must require writing a paper or papers.

Sixth College: Two courses in the 3-quarter CAT sequence will include writing of a paper or papers. In addition, the Practicum requirement includes a significant writing component. Finally, two of the courses in the Breadth Requirements must include a significant amount of writing. The Provost's Office will maintain an updated list of courses taught across the curriculum that include an appropriate amount of writing.

(5.) College Requirements

CEP: The individual colleges will have the option of specifying more than these minimum requirements and/or requiring certain course distributions, as long as they are consistent with the above four requirements.

Sixth College: not applicable

Appendix 2: Sixth College General Education Requirements

Table A: Summary of Sixth College General Education Requirements

	# Units per Course	Units	# Courses (*1 course = 4 units*)	
Core Sequence (CAT)	4-2-6-6	18	4.5	[superscript will remain]
Breadth Requirements[2]				
Interdisciplinary Inquiry	4-4	8	2.0	
Narrative, Aesthetic, Historical Reasoning	4-4	8	2.0	
Analytic Methods/Scientific Method	4-4	8	2.0	
Structured Reasoning	4	4	1.0	
Understanding Data	4	4	1.0	
Social Context	4	4	1.0	
Ethical Context	4	4	1.0	
Art Making	4-4	8	2.0	
Breadth Requirements Subtotal	- -	48	12.0	
Upper-division Practicum	(0-4)-2	2 to 6	0.5 to 1.5[3]	
GENERAL EDUCATION TOTAL	- -	68 to 72	17.0 to 18.0	

_____

[1] – CAT 1 is associated with a 2-unit course, Computers Demystified. Instruction in writing and information literacy is included in CAT 2 and CAT 3.

[2] – Foreign language courses may be applied to the breadth requirements.

[3] -- Upper-division practicum includes a project component and a 2-unit course, Sixth College Communication. The project component of the practicum will frequently be a course that overlaps with the student's major.

Table B: Summary of Sixth College General Education Requirements Compared to Those of Other UCSD Colleges

see attached Excel spreadsheet here

Appendix 3: Sixth College Core Sequence – Culture, Art, and Technology (CAT) – Addendum

Mission: The CAT core sequence mission is, most broadly, to provide a common educational experience for all students entering Sixth College and to establish the vitality and import of that interdisciplinary thinking, seeing, listening, and collaboration which must be at the heart of a college dedicated to culture, art, and technology.

Coherence: CAT core sequence maintains intellectual and pedagogical coherence in these ways:

- It moves from a larger survey course (CAT 1) tracking the relationship of nature and humanity, through an historical case (CAT 2) that focuses upon the arts and technology as agencies of change within human and natural worlds, to a real-world test (CAT 3) of the current applicability of models from both macrocosm (1) and microcosm (2).

- Each quarter has the same template, moving from the individual and small group through to those larger collectives perpetually redefined culturally and technologically. Regardless of the different topics pursued by faculty from diverse disciplines teaching CAT 1, 2, or 3, all courses address the same overarching themes and are structured according to the same four aspects each quarter. (See next pages for an outline of that template).

- Faculty meet to identify particular questions or issues of special moment that are likely to continue from the first through the third quarter, and perhaps also to agree upon some base readings or visual sources that carry through from start to end.

- Teaching Assistants meet to develop a clear sense of how best to maintain the underlying momentum of the Core courses toward an understanding of agencies of change and the need, eventually, to become effective, thoughtful agents of change.

Community: The CAT core sequence promotes Sixth College's mission and spirit in these ways:

- by helping students develop a goodly sense of themselves as members of a college uniquely dedicated to arts, technology, and culture as a nexus for change.

- by giving students a first exposure to the reach, methods, and modes of thought of a number of disciplines whose approaches or tools may later become invaluable to them as they work between the arts and technology.

- by helping students toward a sense of the University as a special kind of community valuing sustained inquiry as a mean toward that sort of wisdom which eventually and necessarily entails engagement with larger issues and affairs.

- by providing opportunities and encouragement for student collaborations within University courses and well beyond the precincts of the University.

- by enlarging the perspective of students so that they are inspired to address, thoughtfully and actively, serious needs of the larger community, the San Diego region.

Skills: The CAT core curriculum, emphasizing the relations between nature and humankind, and encouraging student collaboration and contacts with the larger San Diego community, promotes skills in:
- written, oral, digital and artistic communication.
- information navigation, retrieval, analysis, assessment, and sharing.
- critical reading, extended looking, and deep listening.
- analytic, integrative, and interdisciplinary thinking.
- seeing relationships between concepts and working through their consequences for a diverse society with many historical streams.
- identifying the nodes at which culture, art, and technology are not only historically or philosophically connected but across which they energize each other, so that students come to understand that innovation in every field draws upon (and is ever imbedded in) a cultural ground that is complex and rarely self-evident.

S I X T H   C O L L E G E   C O R E   C O U R S E S :   C A T   T E M P L A T E

Central to developing and sustaining an engaged community of students, staff, and faculty, the core sequence works according to one coherent template toward the skills listed above. Each quarter's overarching theme is examined from the same four aspects: (A) individuals; (B) small groups; (C) geocultural networks, ecological regions, or urban complexes; (D) larger collectives as defined historically and technologically.

CAT 1. Nature & Culture (Evolution of Culture)
        Aspect A: One by One
        Aspect B: One Another
        Aspect C: Complexes
        Aspect D: Continents & Contingencies

Intellectual Challenges: To appreciate, across expanses of time and cultures, the artistic and technological forefront to shifting relations between the natural world and humankind.

Skills nurtured:
(1) Information literacy: library and web searching; distinguishing among facts, opinions, interpretations, and hypotheses; intellectual responsibility.
(2) Reading critically, looking thoughtfully, learning to make sense of synthetic approaches to realms of evidence, and comings to grips with the reaches of theory.
(3) First steps toward listening to one another and developing cogent arguments.

CAT 2. Case Studies (Agents of Change)
        Aspect A: The One & the Many
        Aspect B: Contending Forces
        Aspect C: Agencies of Change
        Aspect D: Implications

Intellectual Challenges: To appreciate a specific historic and cultural context in which the interplay of the arts and technology substantially reshapes the life space.

Skills nurtured:
(1) Information Literacy: distinguishing between primary and secondary materials; critically evaluating and actively authenticating sources; understanding what is at issue with regard to plagiarism and the integrity of scholarship.
(2) Thinking analytically and then integratively; understanding the nexus between idea and expression; exploring forms of argument and proof, especially causation.
(3) Further steps toward instrumental dialogue and intellectual collaboration.

CAT 3.   Working Forward (Creating the Future)
   Aspect A: Personal Intuitions and Initiatives
   Aspect B: Community Initiatives
   Aspect C: Societal Initiatives
   Aspect D: Perturbations

Intellectual Challenges: To put to contemporary test the historically-specific modes of artistic and technological interaction studied in CAT 2 and the more expansive models of artistic and technological transformation across cultures, as studied in CAT 1. To do so through engagement with (1) our heritage of images and projections of positive change, (2) the most innovative or provocative of UCSD scholars and researchers, and (3) the larger community beyond the precincts of the University.

Skills nurtured:
(1) Information literacy: gathering information about the university and San Diego through electronic, oral, printed, and artistic means; researching governmental/institutional sources.
(2) Seeing and developing points of connection among disciplines or paradigms.
(3) Planning and carrying out artistic/technological collaborations that identify and respond to local needs after establishing ongoing dialogue with people in the larger community.

HOW COURSES MAY DIFFERENTLY EXPRESS THE TEMPLATE
AND YET MAINTAIN THE COHERENCE OF THE SEQUENCE

	Section 1	Section 2
CAT 1. Nature & Culture	"Homo Faber"	"Mimesis"
Aspect A: One by One	From cells to song lines	Uniqueness & Imitation
Aspect B: One Another	Tools as art / as culture	Stage/Frame &Audience
Aspect C: Complexes	Slavery & Freedom	Bread & Circuses
Aspect D: Continents	Mapping--tool & weapon	Global Virtualities

Common central issues and questions that carry over to CAT 2:
- How do art and technology mediate relationships between the individual and society?

- How do people of different cultures understand the relationship between a natural world and a humanly fabricated world?
- What recurrent problems of the collective are regularly resolved through the use of art? Or through the use of technology alone?
- In what ways do the arts or the technologies of a culture determine the paths that its members choose or the options they see for themselves?
- Can one generalize about the role of art or technology in a culture according to its environmental, demographic, economic, or other conditions?

	Section 1	Section 2
CAT 2. Case Studies	"Leonardo/Machiavelli"	"Sound Systems"
Aspect A: The One & the Many	Art & Human Scale	Reaching the Masses
Aspect B: Contending Forces	Making Experts	Access & Voice
Aspect C: Agencies of Change	What Experts Do	Artists & Engineers
Aspect D: Implications	Epistemologies	New Soundscapes

Common central issues and questions that carry over to CAT 3:
- How do the arts or specific technologies directly or inadvertently help frame the most critical issues of a particular society?
- What can we say about the role of individual "genius" vs. the role of group invention or societal impulse as an agency of change in a particular society?
- What are the comparative roles of the specialist and the generalist, the expert and the layperson, in effecting change?
- In what way does a culture's emphasis upon one or another of the senses determine the avenues of invention, discovery, or intellectual conflict?
- Are the arts or specific technologies particularly effective vehicles for establishing or maintaining community?
- Is an "avant garde" of artists or of technicians a true harbinger of the future state of that society?

	Section 1	Section 2
CAT 3. Working Forward	"Projections"	"Design/ing"
Aspect A: Personal Initiatives	Dreaming/Conscience	Drawing / Doodling
Aspect B: Community Initiatives	Utopias	Schematics
Aspect C: Societal Initiatives	Systems	Flow Charts/Plotting
Aspect D: Perturbations	Chaos & Renewal	Interferences

Common central issues and questions that may be summed up by CAT 3:
- How do ongoing artistic or technological investigations affect the tenor of hopes and fears about the immediate future?
- We have heard of the "technological fix." Is there such a thing as an "artistic fix"?

CAT 3 STUDENT COLLABORATIONS -- THREE EXAMPLES

Example 1.
Community Engagement drawing upon Aspect A: Personal Intuitions and Initiatives

Katrina, prospective major in computer graphics
Aldrich, prospective double major in sociology and cognitive sciences
Berian, prospective major in theater

Concerned about racism at the University and in the San Diego area, these three students learn about "Community Cousins," a project begun in Olivenhain and prompted by the outrage after the Rodney King beating in LA and the playing of the videotape. "Community Cousins" works on the premise that racism is only possible where people consider others of another race or ethnic group as strangers or foreigners. Therefore, an instrumental if gradual means of reducing racism is to encourage people of different backgrounds, one on one or two by two, to adopt each other as cousins and from that point forth to engage with them as close relations, on social occasions, or for rites of passage, or for Thanksgiving dinner…until the children of each of the corresponding families no longer automatically assume that people of a different complexion or language group must be dangerous. "Community Cousins," which now has some 300 families from all over San Diego involved with each other, is currently in the process of encouraging other places around the country to follow this model, but the group needs help making clear and public its principles, its process, and its modes of action. In discussion with the organizers of "Community Cousins" and some of the families involved, Katrina, Berian, and Aldrich think through some ways to explain this program to others, and eventually they help the group design a website, a brochure, a videotape, and press releases, as well as a mechanism for recording and archiving the past and present achievements of the group. So doing, they will have had to assess the value of this project as an effective agent of change, work hard to listen to people from many different cultural and historically-impacted situations, and thought hard about how to present the Community Cousins program in a light that will be clear and moving to people elsewhere. They will have benefited from CAT I in terms of understanding the larger forces and histories behind racism and xenophobia in "complexes," CAT II in terms of appreciating a particular society's problems with "contending forces," and CAT III in terms of the failures of utopian schemes for universal brotherhood and also in terms of a lecture by a UCSD Communications Professor whose activist video projects highlight both egregious racism and notable efforts at establishing interracial harmony. They also get help from, and become further involved in, the Student Office for Human Relations on campus.

Example 2.
Community Engagement drawing upon Aspect B: Community Initiatives

Stephan, prospective major in structural engineering
Sue, prospective major in visual arts
Malda, prospective major in political science

Concerned (each for a personal reason) with the homeless and the expense of housing in San Diego, these three are introduced to the Straw Bale projects currently underway in San Diego

and in the Tijuana area. They go out to learn how houses can be built thriftily, with energy-efficiency, out of straw bales. Stephan finds in the process that there are structural problems which intrigue him, and Sue is concerned with the unappealing aesthetics of straw bale structures that contribute to the low profile of the projects. Malda, in discussion with several different Straw Bale project managers across the border, determines that there are issues of political economy and community construction codes which must be faced. The three sit down for a while to thrash out a plan that might lead to more support for Straw Bales in San Diego neighborhoods as well as on a regional level. They together approach a professor in cell biology who has spoken in CAT III about extending her own research on how skin tissue reweaves itself after injury, because they think that the reweaving process has analogies both to the way in which Straw Bale houses are built and the way in which Straw Bale houses might be woven into the fabric of the community. They propose to University Housing a model project of a Straw Bale amphitheater in the canyon behind Visual Arts, and they get some other students involved in laying the actual groundwork for such an amphitheater. They have benefited from CAT I, which inspired them to think of tools *as* culture and tools *as* art, and from CAT II, which prompted them to think of houses as stages for the mounting of life, rather than as defensive enclosures.

Example 3.
Community Engagement drawing upon Aspect D: Perturbations

Quiller, not sure of prospective major
Andrew, prospective major in something to do with engineering
Elizabeth, prospective major in physics or maybe philosophy
Jordan, prospective major in music, possibly

These four come together because each was struck by the idea of "permeable membranes" and the image of "shape-retaining fabrics," both used in metaphorical ways during a discussion of migration and North-South issues during CAT I. They also share an interest in the Spanish language and Mexican culture, so they decide to work on a cross-border problem. Migration itself, they soon find, is too big an issue to chew off, but at the suggestion of some UCSD faculty in the Institute of the Americas, one of whom has addressed the class in CAT III, they go to talk with a number of community groups in Southeast San Diego and with some agencies in Tijuana, just to scope out the extent of the cross-border problems. After some debate, they decide they want to do something related to sewage outflows and overflows from the Tijuana River, which not only wreak havoc in nearly random if sometimes predictable ways, but also aggravate cross-border relations because the pollution is seen in San Diego as a metaphorical confirmation of the "dirtiness" of Mexicans in general. But what should they do? What can they do? They contact George Lewis on the music faculty, who has been working as a resident artist with the Point Loma sewage processing plant, for some hints, and he gives them a few more contacts. It is getting late in the quarter, and this is a group which does not like to make up its mind. At last they follow a lead from CAT II, on determining "a human scale," and they decide to do a Performance Art piece which leads audiences to rethink/reimagine the Border as itself a waste-processing plant, putting in question many of the values publicly proclaimed on both sides of the Border. They do this piece to some controversy in a plaza in Del Mar as well as in Imperial Beach and El Cajon.

Appendix 4: Sixth College Breadth Requirements – Examples of Courses

(an approved list of courses will be developed by the Sixth College Curriculum Committee, in collaboration with the academic departments and programs, and submitted for CEP approval)

I.   Methods, Practice and Modes of Inquiry (7.5 to 8 courses)

Justification: It is critical that students familiarize themselves with the different modes of acquisition, production and organization of knowledge to be able to understand, appreciate and communicate across academic disciplines.

A. Interdisciplinary Inquiry

Requirements: two 4-unit courses; one must be in the sciences or engineering

Course Examples (a complete list of all eligible courses will be developed):
BILD 36: Aids, Science and Society
ESYS 130: Environmental Issues: Social Sciences
ERTH 12: History of the Earth and Evolution
HISC 111: Origins of the Atomic Age
LTWL 130: Culture, Ideology and Collective Memory
SOC/L 30: Science and Society

B. Narrative, Aesthetic & Historical Reasoning

Requirements: two 4-unit courses; one must be in the arts & humanities; foreign language study may be applied

Course Examples (a complete list of all eligible courses will be developed):
HIEU 114: Pre-industrial Light and Magic
HISC 105: History of Environmentalism
LTEN 17: Introduction to African-American Literature
LTEN 18: Introduction to Asian American Literature
LTEN 19: Introduction to Chicano Literature
LTEN 24: Introduction to the Literature of the United States
MUS 11: Folk Music
VA 22: Formations of Modern Art
VA 111: The Structure of Art

C. Analytic Methodologies/Scientific Method

Requirements: two 4-unit courses, one must be in the social sciences

Course Examples (a complete list of all eligible courses will be developed):
BILD 10: Fundamental Concepts of Modern Biology

CHEM 11: The Periodic Table
MATH 17: Geometry and the Imagination
PHYS 8: Physics of Everyday Life
POLI 30: Political Inquiry
SOC/D 171E: Science and the Making of the Modern World

D.   Structured Reasoning

Requirement: one 4-unit course

Course examples (a complete list of all eligible courses will be developed):
CSE 11: Java Programming
CSE 12: Basic Data Structures and Object-Oriented Design
CSE 20: Introduction to Discrete Mathematics
CSE 100: Advanced Data Structures
CSE 101: Design and Analysis of Algorithms
LING 17: Code Making and Breaking
PHIL 12: Logic and Decision Making

E. Exploring Data

Requirement: one 4-unit course

Course examples (a complete list of all eligible courses will be developed):
BIEB 100: Biometrics
ECON 120A: Econometrics
MATH 69: Chance
MATH 180A: Introduction to Probability
MATH 181: Introduction to Math Statistics
POLI 80: Political Inquiry
POLI 168: Policy Assessment
SOC/L 60: The Practice of Social Research.
Sixth College X: _____, Exploring Data (to be developed in collaboration with academic
    departments)

II.   Societal Contexts (2 courses)

A. Social Context

Justification: Courses in this category will help students establish cultural competency, a sense
of social breadth, and the knowledge and sensitivity of diversity.

Requirement: one 4-unit course in gender or ethnic studies

Course examples (a complete list of all eligible courses will be developed):
ANLD 23: Debating Multiculturalism: Race, Ethnicity and Class in American Society
CGS 2A: Introduction to Critical Gender Studies
COCU 138: Feminist Theory
ETHN 1C: Introduction to Ethnic Studies: Race and Ethnic Relations in the United States
ETHN 164: African Americans and the Mass Media
HILD 7 A,B,C: Race and Ethnicity in the United States
LTEN 178: Comparative Ethnic Literature
POLI 100H: Race and Ethnicity in American Politics
SOC/B 118: Sociology of Gender

B. Ethical Context

Justification: Courses in this category will help the student to place science, technology and cultural inquiry into an ethical context; they aid in the understanding of values and behavior and their societal implications.

Requirement: one 4-unit course in ethics or religion

Course Examples:
LTWL 176: Literature and Ideas
PHIL 13: Introduction to Philosophy: Ethics
PHIL 165: Professional Ethics
POLI 27: Ethics and Society
RELI 1: Introduction to Religion
SOC/D 158J: Religion and Ethics in China and Japan

III.   Art Making (2 courses)

Justification: To fully appreciate the role that the arts play in society, students should experience art making. The arts represent a rich collection of methods for expressing and communicating important aspects of human and cultural identity. It is important for students of the college to have direct experience with the process of creative expression and creative thinking, and the intellectual risk taking associated with any creative activity.

Requirements: two 4-unit courses from two different departments

Course Examples:
COGN 21: Methods of Media Production
LTWR 8 A,B,C: Craft of Writing
MUS 5: Introduction to Music Making
TH/AC 1: Introduction to Acting
TH/DA 4: Pre-Ballet
VA 1,2,3: Introduction to Art Making

Appendix 5: Course Outline for Sixth College XX, Understanding Data

<u>Sixth College XX, Understanding Data (4 units)</u>

The purpose of this course is to introduce students to the ways in which data can be used to further our understanding of natural and social realities. The course will cover three broad topics: (1) the ways in which data can be represented and summarized in order to understand both the signal and the noise in a set of data; (2) the ways in which data can be utilized to distinguish signal from noise, including the basic logic of hypothesis testing; and (3) the principles of data collection (experimental design) that allow collection of new data in such a way as to maximize the resulting signal.

1) Data representation and summarization

This section will cover topics such as:

   a) Types of data (quantitative and qualitative)
   b) Principles of data representation, including graphical excellence
   c) Principles of data summarization – exploratory data analysis
   d) Principles of estimation – from samples to populations

(2) Distinguishing signal from noise

This section will cover topics such as:

   a) The concept of randomness and chance
   b) The randomization test – what to expect from a random world
   c) Rules of evidence and decision-making – a judge and jury model; evidence versus fact

(3) Principles of data collection

This section will cover topics such as:

   a) Populations and samples – principles of generalization
   b) Psychometric theory – measurement, reliability, and validity
   c) Confounding and strengthening the signal

Appendix 6: Sixth College Upper-Division Practicum -- Addendum

Examples of the Project Component of the Upper-Division Practicum

We emphasize that these lists are composed of examples of ways that students can fulfill the Practicum requirement; the faculty of Sixth College encourages our students to satisfy the requirement through alternative, innovative projects. To meet the requirement through a different path, a student will be required to present a proposal for the project to the Sixth College Upper-Division Practicum Advisory Committee that includes the goal of the project, the methods that will be used, the expected contribution of each of the team members, a time table for completing the project, and, if needed, the name of a faculty member willing to act as advisor. Examples of proposals that demonstrate the recommended format are available from the Provost.

1. Option A – course or internship offered by an academic department or program

The following types of courses will generally satisfy the **Option A** requirement that students participate in a project:

- Senior engineering design courses that require the students to work in teams
- Senior art projects that require the students to work as teams in the production of visual, musical, or theatrical works
- Upper-division courses in social and environmental policy that require a multifaceted team approach to policy analysis
- Independent study courses in which students engage in the solution of a problem or analysis of an issue
- An Academic Internship placement at an institution that uses visual media to educate the public (e.g., a museum)

These courses will frequently overlap with the student's major.

2. Option B – projects or experiences outside the university, approved by Sixth College Upper-Division Practicum Advisory Committee

Albeit not typically eligible for academic credit, examples of projects or experiences that would satisfy the project component of the requirement are:

- Construction of an interactive video game based on historical analysis or cultural issues
- Development of a business plan for a product or service, and pitching the plan to a panel of business representatives.
- Preparation of a grant proposal to support community-based cultural activities or outreach
- Significant participation in a community theater production
- Employment in a conservation corps in the U.S. Forestry Service
- Internship in a company, cultural institution or non-profit organization in which the student has significant responsibility.

• Volunteering for a social sciences organization
• Curriculum development with the Preuss School or other K-12 schools

3. Option C – Sixth College Practicum Course

Projects in this option will require all of the students to collaborate and become aware of the various talents needed to complete a project. Together they will create "something"—it is impossible to know what until they research their topic, discuss options and learn collaborate in a finished product that will be then shared with the College in whatever format is appropriate.

Examples of Projects that might be initiated by students or assigned in the Sixth College Practicum course:

• Adaptation of an existing work: Two literature students, one a writing major and one a literature major, want to adapt a short story or scene from a novel into a short film or video. Students must explain the reason for their choice, its value and its interest for a wide audience. Their personal goal is to begin the writing of a screen treatment. To complete their project they will need: a student with the knowledge of film or video production (ex.: visual arts, theater or communication major); a music major interested in using computers to offer ideas on the kind of music that best suits the drama of the story; a computer science major to create the web page advertising the film or video, complete with bios of the production team, the story and a call for actors and media personnel.

• An assignment to explore the intersections between technology and theatre. The team could consist of a visual arts student, a computer student, a music major with an interest in computer music, a theater student interested in directing, plus another student with subject expertise. They will create a performance piece that employs the various media with which they are familiar and other media they want to know. The students discuss their goal(s), looking for commonality between them—for the "spark" that inspires each to contribute in her/his own way. They may or may not select a "director/coordinator" while also being certain to include every member in the process. Their ultimate goal is a ten-minute performance piece that creatively combines their various disciplines into a coherent whole while satisfying the topic requirement.

Additional projects could include: a one-act play; a multi-media digital art project; or a musical performance with accompanying visual displays. Students could choose to revisit the project completed in the third quarter of CAT to see how they would do it differently given changes in technology and what they have learned in their studies since the time they took the course.

Appendix 7: Projected Sample Programs – Sixth College Students

Sample Program for Majors w/o Intensive Lower Division Requirements–Sixth College

The sample below would lead to completion of most general education requirements during the first two years at UCSD. Variation will occur depending on a student's academic preparation, choice of major, and individual interests and priorities. For example, students majoring in science, math, or engineering will take many prerequisite courses for the major.

FALL	WINTER	SPRING
Freshman Year		
CAT 1 (4 units)	CAT 2 (6 units, includes writing)	CAT 3 (6 units, includes writing)
6th Computer Literacy (2 units)	6th Breadth Requirement	6th Breadth Requirement
6th Breadth Requirement	6th Breadth Requirement	6th Breadth Requirement
6th Breadth Requirement		
(possible Subject A)		

FALL	WINTER	SPRING
Sophomore Year		
open	open	open
open	open	open
6th Breadth Reqmt (2 or 4 units)	6th Breadth Requirement	6th Breadth Requirement
6th Breadth Requirement	6th Breadth Requirement	6th Breadth Requirement

FALL	WINTER	SPRING
Junior Year		
Major	Major	Major
Major	Major	Major
open	open	open
open	open	open

FALL	WINTER	SPRING
Senior Year		
Major	Major	Major
Major	Major	Major
6th UD Pract (overlap w/major likely)	open	GE—6th College Comm (2 units)
open	open	open

MAE – Mechanical Engineering Major
based on "Recommended Course Sequence for New Fall 2000 Students"
Sixth College General Education requirements listed in italics;
6th BR = MAE courses that may potentially fulfill Sixth Breadth Requirements

FALL	WINTER	SPRING
Freshman Year		
Math 20A[1]	Math 20B[1]	Math 21C
MAE 1	Phys 2A	Phys 2B/2BL
Chem 6A	Chem 6B	MAE 3 *(BR – Art Making)*
6th core – CAT 1	*6th core – CAT 2*	*6th core – CAT 3*

FALL	WINTER	SPRING
Sophomore Year		
Math 21D	Math 20F	Math 20E
Phys 2C/2CL	MAE 9/10 *(BR – Computer Lit)*	MAE 130B
MAE 20	MAE 130A	MAE 131A
6th GE—Narrative, Aesthetic, Hist.	*6th GE—Narrative, Aesthetic, Hist.*	*6th GE—Analytical Meth-Social Sci*

FALL	WINTER	SPRING
Junior Year		
MAE 110A	MAE 101A	MAE 101B
MAE 105 *(BR—Interdisc Inquiry)*	ECE 101	MAE 141A
MAE 140	MAE 130C	MAE 170 *(BR—Anal/Sci Method*
6th GE—Social Context	MAE 160	*6th GE—Social Context*

FALL	WINTER	SPRING
Senior Year		
MAE 101C	MAE 171A *(6th BR—UD Pract proj)*	MAE 171B *(6th BR—UD Pract proj)*
MAE 156A	MAE 156B	TE *(possible 6th BR—Interdisc Inq)*
MAE 150 *(6th BR—Dig/Mach Logic)*	AS	AS
AS	*6th GE—Ethical Context[2]*	*GE—6th College Communication*
	6th GE—Art Making	

AS -- Area of Specialization; three courses selected from a single area.
TE -- Technical Electives (TE) must be an upper-division or graduate course in the engineering sciences, natural
    sciences or mathematics.
[1] -- many engineering students enter with Advanced Placement credit in Math 20A and 20B
[2] -- several engineering programs currently require professional ethics content in their courses and may be
    considered by the Provost for the Ethical Context breadth requirement

Number of General Education Courses Beyond Those Required by MAE Major Program [*]
Earl Warren 9
Thurgood Marshall 10
John Muir 11-12
Eleanor Roosevelt 13-14
Revelle 13-17
Sixth 11.5

[*] -- data for existing colleges extracted from MAE web site

Appendix 8: Sixth College TA Training

CEP has expressed concern about TA preparation and training for the Sixth College core course sequence on culture, art, and technology. TA training for such interdisciplinary courses covering wide-ranging material examined from diverse perspectives, and taught by faculty from different disciplines, will not be essentially different from the TA training required in the present college core courses: Revelle Humanities, Marshall Dimensions of Culture, or Roosevelt Making of the Modern World. In all three of the existing sequences, most TAs may be familiar with some aspects of the course subject matter, but are not initially prepared for the majority of material outside their own specialization.

As in all of these sequences, the Sixth College core sequence will train TAs to be discussion leaders and graders for specific readings and projects in specific courses. Because this training is among the responsibilities of the Writing Program Director, one of the selection criteria for the Writing Program Director position will be a proven track record in training, supervision and mentoring of TAs. The Core Sequence Director, along with the Writing Program Director, will teach an orientation seminar (its actual breadth and scope to depend on resources) in which the TAs will be prepared for the topics and readings in the course. Required lecture attendance will be factored into the workload expected of the TAs.   Guidelines will also be established for grading and evaluating writing assignments, group projects, and computer assignments. In addition, throughout each quarter of the sequence, the individual course instructor and the Writing Program Director will meet weekly to discuss current readings and assignments, monitor TA grading and evaluation, visit TA sections, and oversee student progress.

Appendix 9: Instructional Technology

The Learning Platform is a comprehensive Internet-based instructional technology package (developed at the UCSD campus) that allows the design of web-based instructional content and provides instructors and students with the tools to create and share digital information, to communicate synchronously, and to manage course content. The Learning Platform Technology has been tested in a pilot project during the academic year 1999/2000. It has been used to develop web-enhanced courses in Biology and Chemistry and to deliver an on-line Chemistry course (Chem6B) during Summer Session 2000.

The Learning Platform and other available educational technology tools will be used to enhance and enrich the Sixth College core sequence. The Curriculum Support and Development Unit of Sixth College will work with the faculty and teaching assistants to facilitate the use of technology in the classroom and to develop and implement activities that will take advantage of in-classroom communication between instructor and students.

Appendix 10: Administrative/Support Staff and Operating Resources

Resources for the permanent operating funds (salaries and typical office expenses) and temporary start-up funding (equipment and furnishings) are scheduled to be provided by Academic Affairs, Student Affairs, and Housing. Appropriate space for computer labs associated with projects in the third quarter of the core sequence and the upper-division practicum will be planned with Academic Affairs and Academic Computing Services.

A. Academic Affairs permanent funding will be provided for a total of 6.00 FTE by Spring 2002, including: the Provost (2000-01); a Business Manager (Winter 2001); a Director of Academic Advising (Spring 2001); and an Academic Advisor and two administrative assistants (Spring 2002).

In Winter/Spring 2002, the Provost will assemble a Sixth College Curriculum Support and Development Unit, including a Director, a 9-month Lecturer, a program representative, an administrative assistant (.75 FTE), and teaching assistants.

As Sixth College grows, additional staff and operating funds will be required. Current workload comparisons indicate that staffing of one academic advisor and one support staff person for every 800 students is required.

Annual S&E funding will be required. The colleges are currently funded at a base budget of $13,000 plus $13-per-student-enrolled.

B. Student Affairs permanent funding will be provided for a total of 5.00 FTE by Fall 2002, including: a Dean of Students and an administrative assistant (Fall 2001); other positions (an Assistant Dean of Students, a Coordinator of Student Activities, and a Counseling Psychologist) will also likely be filled by Spring 2002. As enrollments increase, other staff funded by Student Affairs may also be needed.

C. Housing permanent funding will be provided for a total of 4.00 FTE by Fall 2002, including: a Resident Dean and an administrative assistant (Fall 2001); and two Assistant Resident Deans (Spring 2002). As enrollments increase, additional support staff and student Resident Advisors will be needed.

Appendix 11: Letters of Support from UCSD Academic
Departments, Programs, and Research Units

Department or Unit	Author
Anthropology Department	Guillermo Algaze, Chair
Center for Research in Computing & the Arts (CRCA)	Sheldon Brown, Director
Cognitive Science Department	Gilles Fauconnier, Chair
Communication Department	Carol Padden, Chair
Computer Science & Engrg. Department (CSE)	Ronald Graham, Chair
Critical Gender Studies Program	Rosemary George, Director
Ethnic Studies Department	Charles Briggs, Chair
Linguistics Department	Maria Polinsky, Chair
Literature Department	Lisa Lowe, Chair
Mechanical & Aerospace Engrg. (MAE) Department	Miroslav Krstic, Chair, UG Affairs Comm.
Music Department	John Fonville, Chair
San Diego Supercomputer Center	Francine Berman, Director
Sociology Department	Carlos Waisman, Chair
Structural Engineering (SE) Department	Frieder Seible, Chair
Theatre & Dance Department	Walt Jones, Chair
University Library	Brian E. C. Schottlaender, Univ. Librarian
Visual Arts Department	Susan Smith, Chair

Copies of the above letters may viewed on the Academic Senate web site at the following URL:

http://www-senate.ucsd.edu/sixth/letters.htm