# **General Education Program**

# Self Study 2001-2007

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**Program review committee members:** 

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## **General Education Pattern Program Review**

## I. Introduction and Overview of the Program

Developed by both faculty and students and based on system guidelines (Executive Order 595), the university's General Education Program is "an introduction to the breadth and depth of the dynamics of human experience". It provides students with a foundation in the liberal arts and sciences and prepares them for specialized study in a particular discipline or program.

"The overall objective of General Education is to create a context wherein basic skills are developed and strengthened, scholarship and disciplined thinking emerge, awareness and reflection occur, and ultimately - the integration of knowledge begins."

In the 1999-2000 academic year, the university introduced a major revision of the General Education program that the faculty senate believes is improved in content and which facilitates transfer to the university. Since over half of the student body transfers from another institution, the transfer issue is important. All students enrolling in the university as first-time freshmen beginning fall 1999, and all transfer students entering fall 1999 or after; who elect to adopt the 1999-2000 or current catalog are required to complete this General Education Program.

The General Education Program is described in detail in the document approved by the academic senate contained in Appendix 1 (Academic Senate). It is an integrated curriculum of courses organized into four groups:

- FOUNDATION, the basic foundation of one's university education, consisting of oral (A1) and written (A2) communication, critical thinking (A3) and quantitative reasoning (B4) (4 courses).
- BREADTH exposes students to a variety of disciplines within a structured framework that develops knowledge in four basic areas of human endeavornatural (B1 and B2) and social sciences (D1, D2, and D3), arts (C1) and the humanities (C2). It also includes a life long learning component (E) (9 courses).
- INTEGRATION ties together the Program by providing an integrative experience at the upper-division level in natural sciences (IB), the arts (IC), and social sciences (ID) (3 courses).
- MULTICULTURAL/INTERNATIONAL (ID) completes the General Education Program with an upper-division experience as preparation for an international, multicultural world (1 course).

The General Education Program requires students to complete a minimum of 51 semester units. All requirements must be met with courses of at least three semester units. The four upper-division courses should be taken no sooner than the term in which 60 units of college coursework are completed.- However, since students face impacted enrollment in some areas of GE, they often take these upper division courses before completing 60

units and this regulation in not enforced through the registration process. A minimum of 9 units of course work for General Education must be taken in residence.

## **II.** Previous Action Plan or Recommendations from Prior Review.

While disparate efforts have been undertaken in the recent past to assess the GE program, this is the first campus program review of General Education. However, it is important to know something about these previous efforts. When the academic senate approved the GE program in 1999, it charged the GE Committee with "Coordinating a regularly scheduled review of General Education courses to ensure compliance with General Education policies and guidelines" and indicated that "All courses in General Education must be resubmitted and reapproved every five years during a review performed by the General Education Committee to ensure the courses continue to meet the objectives and intent of the program." Additionally, the senate noted that "To help ensure that all courses satisfying the Area A requirement are adequately directed towards achieving the stated objectives of Executive Order 595, and to provide reasonable assessment of fulfilled goals; faculty involved in the teaching of each subarea (A1, A2, and A3) will form a coordinating committee for that subarea. Each [sub area] coordinating committee will keep informed about issues related to teaching in that area, coordinate content and evaluation standards for the courses, review syllabi from all sections of the courses, and be responsible for appropriate assessment of the skills being taught." (Academic Senate)

General Education Assessment was mandated by the senate in 2001. Actually, the senate directed the development of an assessment task force and charged it with five general assignments. The task force was not appointed until 2003-2004 when the university needed information for the WASC Accreditation. The assignments and the task force's initial responses (in italics) are listed below.

- Development of outcomes and methods of assessment appropriate for each of the areas. *Between 2001 and 2003, the university developed a set of outcomes for each GE area.*
- Identifying a rationale for what data can and should be collected and who gets it. *APM 204 passed in April 2000 would appear to address this.*
- Using assessments of English, speech and critical thinking developed by the GE committee. *In 2002-2003, writing rubrics were developed and an analysis of student writing was conducted. Also, surveys of students and faculty in Areas IB and IC were conducted.*
- Employing findings of previous studies conducted in the early 1990s. *The value of studies conducted 10 years ago on a different GE package may be of limited value.*
- Examining the adequacy of administrative support, increase in faculty workload and the method of continued oversight of the assessment process. *Apparently not completed*

The task force launched a number of initiatives. In 2003-2004, surveys of students and faculty in Areas ID and MI were conducted. Syllabi from upper division courses were reviewed by the Task Force. Syllabi from lower division courses were reviewed by the General Education committee. The GE committee also examined course offering and enrollment data. In fall 2004, GE faculty were surveyed to understand when and how

they met area learning objectives and to solicit input on desired changes. A number of recommendations emerged from these efforts including the following:

- 1. Crisper statements of student learning outcomes should be developed to enhance future assessment activities in General Education Areas.
- 2. GE course syllabi should have a stronger connection to their model syllabi submitted by the department and approved by the General Education Committee.
- 3. Connections between expected student learning outcomes and specific course elements, which were included in the original course proposals, should be more explicitly mapped to course elements in GE course syllabi.
- 4. Campus policy currently <u>urging</u> GE faculty to include an iterative approach in which students receive instructive feedback and an opportunity to revise their work should be amended to <u>require</u> that iterative approach.
- 5. GE course syllabi should do a better job of detailing how they meet the 4000-word writing requirement, including a description of the assignment components, methodology, goals of the assignment, and criteria/standards against which they would be evaluated.
- 6. GE course syllabi should require sustained reading of primary source or non-textbook assignments to enhance student command of language, rhetoric, and argumentation.
- 7. Compliance with requirements for campus syllabi outlined in the Academic Policy Manual should be improved.
- 8. Every four years, students enrolled in upper division writing-intensive "W" courses be given the same ACT CAAP Test of Writing Skills, which will provide a one-semester snapshot of general student writing skills.
- 9. Alternating between the administrations of the ACT CAAP Test of Writing Skills beginning two years after its first use, students enrolled in upper division writing-intensive "W" courses should be given the ACT CAAP Writing Essay Test, which will complement objective test results from the Test of Writing Skills with the evaluation of student writing samples.
- 10. On an experimental one-semester basis, students enrolled in courses meeting the GE Area IC requirement be given the ACT CAAP Reading Test. At the same time, two large sections (50+ students each) of the freshman University 1 course should also be given the same reading test. Together we will have measures of student reading skills at entrance and at the upper division level. Once results are known, this recommendation will be revisited and reevaluated.
- 11. Learning outcomes for each GE Area of study should be reviewed as the first set of test scores is made available, both to sharpen our own statements of student learning objectives and to evaluate the information contained in the set of test scores.

In 2004-2005, at the recommendation of the GE committee the academic senate addressed items 4 and 5 above by changing the writing requirements and spelling out the nature of such requirements. The total writing requirement was reduced by half (from 4,000 words to 2,000 in upper division GE courses and from 2,000 words to 1,000 in lower division GE course) and a substantial portion of the writing must be iterative with feedback provided from the faculty member and an opportunity to revise the work. Course syllabi were collected from all departments to assess compliance with campus

policy (item 7). The CAAP reading test was given in Spring 2005. Based on the results of the reading test, three recommendations were made:

- 1. Campus attention should be paid to improving the reading skills of entering firsttime freshmen. Since an estimated 50% of our first-time freshmen enroll in University 1, an early intervention might be mounted in coordination with this class.
- 2. Campus attention should be paid to improving the reading skills of students declaring majors in professional areas of study, including agriculture, business, engineering, and health/human services. To the degree that professional schools have sequenced curricula, intervention might be effectively planned to intercept professional majors early in their upper-division coursework in the major.
- 3. Campus attention should be paid to targeting effective pedagogical practices that improve student reading skills. Faculty development in the area would be helpful.

Additionally, as a follow-up to the reading test, a group of faculty funded by a grant from the Provost are working to develop a method to identify students needing assistance to improve their reading, help faculty develop and use methods in their courses that assist in the development of student reading abilities, develop a reading response mechanism in the Learning Resource Center, and develop a professional development program in this area.

The CAAP writing test was administered in Spring 2006. There were significant differences by ethnicity and GPA but not by major, gender or whether a student started as a freshman or transferred. Using the results from this test, the writing competency subcommittee is in the process of developing a proposal for a 'writing across the curriculum' program.

## III. Description and Evaluation of the Program.

## A. Mission and Goals of the Program

As noted above, the General Education program designed by the Academic Senate has an overarching objective to "create a context wherein basic skills are developed and strengthened, scholarship and disciplined thinking emerge, awareness and reflection occur, and ultimately—the integration of knowledge begins." (Academic Senate, 11/9/1998). The mission of the program should be more than establishing "a context" in which the listed things occur. As the first step of the assessment plan, it is suggested that a stronger mission statement for general education be developed.

## 1. Alignment of the Program and the University's Missions and Goals

The General Education program supports the mission and goals of the university in the following ways:

a. It provides a way to expand students' intellectual horizons, foster lifelong learning, prepare them for further professional study and instill within them an appreciation of cultures other than their own. This supports the university's effort

to offer a high-quality educational opportunity to qualified students at the bachelor's and master's levels, as well as in joint doctoral programs in selected professional areas.

- b. The program provides a foundation for undergraduate degrees and programs in the liberal arts and sciences as well as in a variety of professional disciplines emphasizing agriculture, business, engineering and technology, health and human services, and education, preparing students for productive careers and responsible world citizenship.
- c. The upper division component of the GE program provides a venue in which students can integrate learning from foundation and breadth courses and from GE courses taken elsewhere in support of the university mission to provide "a forum for the generation, discussion and critical examination of ideas".
- d. By emphasizing the primacy of quality teaching and the close interaction between faculty and students, the GE program promotes development of a community of scholars and an environment in which students learn to live in a culturally diverse and changing society.
- e. The GE program prepares students to live and serve the San Joaquin Valley "while interacting with the state, nation and world".

The GE program also helps the university achieve other goals. The American Association of Colleges and Universities (AAC&U) has launched the *Liberal Education and America's Promise (LEAP)* program in which the University participates. LEAP identifies essential learning outcomes that students should achieve. These include:

- a. "Knowledge of human cultures and the physical and natural world through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts focused by engagement with big questions, both contemporary and enduring.
- b. Intellectual and practical skills including inquiry and analysis, critical and creative thinking, written and oral communication, quantitative literacy, teamwork and problem solving practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects and standards for performance.
- c. Personal and social responsibility including civic knowledge-local and global, intercultural knowledge and competence, ethical reasoning and action, foundations and skills for lifelong learning anchored through active involvement with diverse communities and real-world challenges.
- d. Integrative learning including synthesis and advanced accomplishment across general and specialized studies demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems."(AAC&U)

The LEAP program emphasizes that liberal education should include both general education and training in a specialized field (the major). In Fall 2006, the University President authorized and the Provost appointed a task force charged with identifying the qualities desired of graduating students (Q-Dogs). This group has met throughout the 2006-07 academic year and is hopeful of reporting out not only the qualities but

suggestions for how to assess whether or not students have them. Their draft report is contained in Appendix 2. The president and provost have both indicated that these outcomes will be important to the GE Program Review. Thus, they are included here as additional university goals that the GE Program supports. The outcomes from the Q-Dogs taskforce are currently being refined as the task force continues its work in 2007-2008. They include passion, achievement, courage, engagement, and ethics. (QDOGS Task Force).

## 2. Alignment of the Program and the College/School Goals

The General Education program supports the mission and goals of the colleges within the University in a number of ways as shown in the table below.

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College	Mission statement	GE Area
Agricultural	problem solving through the application of basic	A, B, IB,
Sciences	scientific principles, global view of the world	MI
Arts and	participate in and absorb the full range of creative	C, IC, D,
Humanities	and interpretive experience, knowledge of modern	ID
	languages	
Craig	Preparestudentglobal business environment	MI
Kremen	development of ethically informed leaders,	A, C, D,
	Fostercollaboration, valuing diversity, critical	IC, ID, E
	thinking, ethical judgments, reflection, and life-long	
	learning.	
Engineering	enhance student comprehension and learning	ALL
HHS	cooperates with other units of the university to	ALL
	provide a comprehensive curriculum required to	
	effectively prepare qualified professionals	
Science and	serve as a foundation for a career in science and	A, B, IB,
Math	mathematics, solving applied scientific problems of	D, ID
	the region,	
Social	knowledge of human social experience in all its	ALL
Sciences	diversity in order to educate students and train	
	leaders to benefit humanity, instill a concern for	
	human values and civic responsibility, advance in	
	their knowledge of societies and cultures, enlightened	
	stewardship of the ecosystems	

## 3. Reflection of Any Recent Changes in the Discipline

The University has had three General Education patterns in the last 25 years. The most recent change occurred in the 1999-2000 academic year. More recently, the CSU Statewide Academic Senate has initiated discussions to consider whether changes should be made in the 14 year old Executive Order 595 that stipulates the format of the current program. The national debate is typified by the LEAP program mentioned above and in the writings of Derek Bok (Bok). Bok argues that colleges and universities should focus on developing student's communication, critical thinking, moral reasoning, and citizenship skills; help them learn to live in a diverse and global society; encourage them

to develop a breadth of interests; and prepare them for a world of work. Certainly many of these purposes are to be captured in a general education program.

The California Commission on Teacher Credentialing (CCTC) has outlined specific requirements for courses to meet credentialing requirements. This has impacted the GE program in that a number of courses have been specifically designed to meet these requirements and have been approved for GE credit only for liberal studies majors. Similarly the Smittcamp Honors College and engineering majors have modified GE patterns.

## **B.** Effectiveness of the Instructional Program

# **1.** Student Learning Outcomes as Developed in the Program's Student Outcomes Assessment Plan (SOAP)

In 2004-05 each faculty member teaching a general education course was asked to complete an online form describing when and how each objective was met in his/her course. Suggestions for improving the objectives were also elicited from the faculty. The finding from this effort was that the "objectives" designed for each general education area need to be articulated as measurable learning outcomes. In addition, the GE committee felt that in order to get faculty to buy in to any outcomes assessment activities within GE, the learning outcomes must be agreed upon by faculty within the discipline. In April of 2006 letters were sent from the GE committee to the Chairs of all departments which have courses in GE. The letter explained that workshops would be held in Fall of 2007 to formulate goals and learning outcomes for each area within GE, and requested that at least one faculty member teaching in each course attend the workshops. A general invitation was sent out to all faculty via bulletinboard announcing the workshops and encouraging all faculty with an interest in the area to attend.

Over a three week period in September 2007, 90 minute workshops were held (one for each GE area) to formulate goals and learning outcomes for that area. The workshops had varying degrees of success, with some workshops accomplishing the mission of revised goals and learning outcomes, while other workshops were less productive with faculty generally suspicious of assessment activities. The groups within each area will meet several more times throughout the year with a goal of establishing goals and learning outcomes by the end of the spring semester.

No SOAP has been developed for the General Education pattern to date. Therefore, this year the GE committee will request each area subgroup to develop a student outcomes assessment plan based on their revised goals and learning outcomes

## 2. Curriculum

## a. Structure/Coherence of the Instructional Program

The structure of the GE program was outlined in Section I and is detailed in Appendix 1. In this section, that structure is further described and is evaluated.

GE courses in Areas A2, D1 and D2 meet both general education and state mandated graduation requirements (composition, history and government). Additionally, students

are able to use one of two upper division GE courses (Anth 116W in Area ID or Anth 105W in Area MI) to meet the upper division writing requirement. Departments may allow students to double count general education courses for courses in the major. However, students may not use an upper division course taught by the department of their major for general education.

While the General Education Program is intended to be an integrated curriculum of courses, this integration is largely left to the students. The GE program actually consists of 17 stand-alone courses for entering freshmen, with only 4 upper division requirements for students transferring in as GE certified. Though the three required upper division GE courses labeled integration are supposed to integrate learning from lower division GE courses, that is often not the way the courses are taught. Many faculty members report that students are under-prepared for such courses, whether because students have not completed the required pre-requisites within GE or need further discipline-specific preparation.

The academic senate took steps to address coherence in Area A. The language establishing the GE program included this directive: "To help ensure that all courses satisfying the Area A requirement are adequately directed towards achieving the stated objectives of Executive Order 595, and to provide reasonable assessment of fulfilled goals, faculty involved in the teaching of each sub-area (A1, A2, and A3) will form a coordinating committee for that sub-area. Each coordinating committee will keep informed about issues related to teaching in that area, coordinate content and evaluation standards for the courses, review syllabi from all sections of the courses, and be responsible for appropriate assessment of the skills being taught." It provided additional direction specifically for A3 (critical thinking): "To ensure adequate coordination of standards and satisfaction of these guidelines, the coordinating committee for sub-area A3 (Critical Thinking) shall be made up of all the Critical Thinking instructors.

- 1. This committee shall meet regularly, at least once a semester.
- 2. In order to keep informed about issues related to teaching Critical Thinking, the coordinating committee shall maintain an ongoing collaboration with the Center for the Enhancement of Teaching & Learning, the Statewide Critical Thinking Council, and with other such bodies whose goal is to keep the teaching of Critical Thinking at the state of the art.
- 3. All syllabi for Critical Thinking courses (i.e., courses offered for General Education credit under sub-area A3) must be reviewed by the coordinating committee.
- 4. The coordinating committee shall compile and maintain a test bank of questions appropriate for Critical Thinking courses.
- 5. In order to provide appropriate assessment of student achievement in Critical Thinking courses, at least one hour of the final exam in Critical Thinking courses shall consist of questions from the test bank compiled by the coordinating committee. Acceptable format for questions will be determined by the coordinating committee. All instructors may submit questions for this test

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bank, but the coordinating committee will have the ultimate say in determining acceptability of questions." (approved by Academic Senate 12/1/97)

Although the critical thinking committee was formed and has reviewed syllabi, it has not met regularly, nor has a common test bank been created. The Department of Communications (A1) selected syllabi from Comm 3, 5, 7, and 8 and reviewed them to see if they were in line with GE requirements. The English department revised the introductory composition course in 2006 and is evaluating the effectiveness of the course in meeting their objectives.

The number of courses in the GE program is questioned on occasion. It is sometimes argued that previous revisions of the GE program have been undertaken because there were too many courses in the program. However, since the 1999 revision, the GE committee has generally held that courses meeting the requirements should be allowed in the GE program. There are some very general limits established by the Academic Senate in that no more than two courses from any one department may be used to meet the requirements for Area C. The same is true for Area D. Also, "only rarely shall departments or programs have courses in more than one General Education Area B, C, D, or E". Several departments/programs have taught courses in two areas in recent semesters (Armenian Studies; Art; Child, Family, and Consumer Sciences; Chicano and Latin American Studies; Linguistics; Philosophy; Psychology and Theater Arts. No department is teaching courses in more than two areas. Furthermore, students are restricted from taking more than two courses from any one department in their general education programs and this is enforced in the graduation evaluation process. Perhaps this policy needs to be reinforced in the mandatory advising implemented Fall 2006 and through academic 'roadmap' information available to students, since it has been reported that some students are first aware of this policy when they receive a letter from registrar stating courses remaining in the process of clearance for graduation.

Although there is an average of 15.4 courses offered in each sub area of GE, the number of courses offered in each area varies greatly. Currently there are six of the 16 sub areas with one to four courses each, while four areas (C2, D3, IC and MI) have between 30 and 42 courses each. A large number of courses within some areas of the GE program make uniform student outcomes difficult unless they are defined in very broad terms.

Enrollment data for courses offered Fall 2005 through 2007 are presented in Appendix 3. Interestingly, the total enrollment for Area D3 (Social Sciences) is 16,107 while total enrollment in most other areas is under 10,000. This suggests a large number of students are taking classes in the area for some reason other than GE requirements (interest, major requirements, etc).

## b. Cooperative Efforts with other Academic Programs-Joint Degrees, Service Courses, General Education Courses

The GE program relies on faculty and departments from across campus and is thus inherently cooperative. Concerns have been raised by some departments who fear that their students are not receiving a quality GE program because other departments are

using predominantly part time faculty in the delivery of GE courses. This assumes parttime faculty are less effective than full-time faculty in delivering such courses. At this time the GE committee has no evidence to support a position regarding the status of faculty assignment to GE courses. There are significant differences in the delivery of GE courses across the various areas (see Appendix 4, Tables 1 and 2). For example, in Area A2 (written communication) 91% of sections are taught by part time faculty (73% TA/GA, 26% lecturer) while in Area MI (multicultural/international) 82% of sections are taught by full time faculty.

## c. Research on Effectiveness of Teaching and Learning

In Fall 2005 and again in Fall 2006, students were able to register in "learning communities" in oral and written communications courses. The same set of students were in an English and a Speech course-usually meeting back to back and sometimes in the same location. In Fall 2005, students who had high school grade point averages in the 2.51-3.00 range and either passed or were exempt from the English Placement Test earned a significantly higher grade in English if they took the course as part of the learning community compared with taking it alone. Students were surveyed in the following spring semester both years to determine their response to the learning community experience. Even though faculty for the most part did not change the way they taught the courses, students reported satisfaction with this approach. For those enrolled Fall 2006, 78% of respondents indicated they would recommend learning communities to other first-year students (down from 85% the year before), and 76% felt that learning communities should be extended beyond the first semester (similar to last year's response of 78%). Students still indicated that they became better acquainted with other students in their learning community courses (82%). They were comfortable asking for feedback on their work (75%) and more likely to study with students from within the learning community than with students from other courses (53%). A majority of students (57% compared to 63% last year) are still in contact with students from the learning community. Of these, 19% characterize their interaction as primarily academic, 61% as both academic and social, and 19% as primarily social. Based on these results, new learning communities have been designed for Fall 2007. Students will be paired in Political Science and Communication or in History and English. Other learning communities in general education might be considered in subsequent semesters.

Currently due to different student evaluation instruments used in various departments and colleges, this information cannot be aggregated for review purposes. As the university moves toward a standardized instrument for student evaluations of instructors, this information might be useful for the GE committee as a measure of effectiveness of teaching from the students' perspective.

## 3. Recruitment, Retention, and Student Services

Relative to retention, the university has looked at high risk courses (those with more than 30% of the students earning a D, F, W, NC or WU). A surprisingly large number of these are General Education courses (see Appendix 5 Table 1 where 23 of 38 of the courses

listed in 2006 were GE courses). These high risk courses are grouped in certain areas of GE: In particular, Areas A3 (critical thinking -3 courses), B1 (physical sciences - 5 courses), B2 (life sciences - 3 courses), and D3 (social science - 5 courses) seem to be particularly high risk. This supports the widely-held impression of faculty that students are generally unprepared in the areas of science and math. What is perhaps surprising is that Area A3 (written communication) is not represented here as this is the other area in which faculty generally feel that students do not perform well.

## 4. Community Interactions (Professional, Disciplinary, Industry/Regional)

Members of the General Education Committee (and the GE Assessment Task Force) have been actively involved in professional development. Several committee members attended a CSU-System GE assessment meeting in 2004. Others attended the General Education meetings sponsored by the American Association of Colleges and Universities in 2006 and 2007. These have provided useful information in the development of the assessment efforts carried out to date and in the development of an assessment plan.

## C. Effectiveness of Research, Scholarly, and Creative Activities

Research on the General Education Program beyond the assessment efforts mentioned is limited. There has been some research into effectiveness of pedagogy in one of the courses in Area B4 (DS 71) that has resulted in better coordination across sections, new teaching tools, and improved outcomes. It would be helpful if Deans and Departments recognized the scholarship of teaching and encouraged faculty teaching GE courses to engage in such scholarship.

## **D.** Resources

**1. Financial/Budgetary-**The general education program is distributed across the colleges and schools and does not have a separate budget. Classes are offered by departments and are paid for out of college allocations which are FTE driven. In that sense, the courses are considered to pay for themselves. In a number of cases, the "earnings" are far more than the cost of delivering the courses and can be used to subsidize other college/school offerings. The Provost has allocated funding in each of the last four years to support GE Program review and assessment. These funds have been used to send faculty teams to national meetings, pay for administration of nationally normed instruments evaluating reading and writing, and support the release of a faculty assessment fellow. It might be helpful if this funding were also to extend to departments which teach in GE to be used to improve GE assessment.

## 2. Faculty/Staff

**a.** Adequacy and Availability-Faculty are assigned to teach General Education courses by department chairs, and as noted above, concerns have been raised relative to the number of part time faculty teaching in the program. Appendix 4- Table 1 shows the distribution of courses taught by full time vs part time faculty. Areas A1, A2, B1 and B2 all show very high levels of part time faculty. Only the upper division areas (IB, IC, ID, and MI) and critical thinking (A3) have high levels (greater than 67%) of

courses taught by full time faculty. Appendix 4-Table 2 shows the distribution by faculty rank for the Fall 2004 through Spring 2006 semesters. The areas noted above with relatively high levels of part time faculty differ in the types of part time faculty used with areas A2 and B2 using more graduate teaching assistants and areas A1 and B1 using more lecturers.

The General Education committee membership requires 13 voting members, but the committee has not had full representation for the last five years. The committee is typically three to five members short of full membership. For example, before elections in fall of 2007, the committee was down to only six members. Following the elections this semester there are ten voting members including two student representatives. The Craig School of Business has been notably absent from the committee.

**b.** Professional Development/Travel Support-as noted under budget, some money has been used in recent years to send faculty teams to national conferences on general education. The Center for Enhancement of Teaching and Learning (CETL) provides ongoing workshops and seminars for faculty teaching at the university. Some of these have particular relevance to GE. For example, given the writing requirement in most GE courses, the workshops on effectively incorporating writing into a course are likely to be of interest to GE faculty. The committee feels that although the resources at CETL are available to part time lecturers, many may not be aware of them. Departments should be encouraged to make their part time faculty aware of the CETL events and encourage participation in these workshops.

**3. Implementation and Currency of Technology-** No particular emphasis is placed on incorporating technology into GE courses. The university provides support for such efforts via Digital Campus. Faculty fellows, instructional designers and student support are available to assist faculty wishing to incorporate technology into their course. Given the ubiquitous nature of technology, perhaps there should be some method of ensuring that students and faculty are exposed to technology in the GE program

## 4. Other:

a. Space-Classrooms, Laboratories, Offices. There is no central distribution of classrooms or laboratories for general education. Classrooms are allocated to colleges/schools and they oversee the assignment by department. Laboratories are managed by the colleges/schools. Adequacy of space is therefore an issue to be addressed by the various departments and colleges/schools.

**b.** Library Assets- Given the range of subjects covered in general education, it would be exhaustive to address the needs of each individual subject area within GE. Faculty in the departments offering courses in GE are assumed to work with the library to ensure adequate support materials are in place. The Madden Library and the Center for Enhancement of Teaching and Learning both maintain a number of resources on teaching which includes books on learning objectives, assessment-including general education assessment, and pedagogy.

## IV. A Student Outcomes Assessment Plan for General Education

The general education program consists of lists of courses in 16 different areas that meet criteria established by Executive Order 595. A learner centered model would focus on intellectual skills and learning outcomes rather than courses. As an assessment plan was developed, the general education committee considered if the current distributional model should be modified to be more learner centered. We also recognized that the university and the major programs of study have expectations of the general education program. As part of the assessment plan, these characteristics and expectations need to be articulated, and in ways they can be measured need to be developed. Then a process needs to be put in place to gather and evaluate data. The Qualities Desired of Graduating Students (QDOGS) task force assisted in this effort.

The assessment plan was developed using the following guiding principles:

- 1. Assessment should be based on the mission and goals of the general education program.
- 2. Assessment of learning outcomes needs to be a campus wide effort involving the entire university community as well as alumni and employers.
- 3. A diverse array of assessment measures appropriate to each discipline should be used on an ongoing basis.
- 4. Assessment should address basic skills initially and expand over time to address higher order outcomes of the program.
- 5. Realistic assessments should be embedded in all courses.
- 6. The goal of assessment is program improvement. Data should be used for this purpose.

## **Components of the plan**

## Mission and goals.

Since the GE program is designed by campus faculty within parameters established by the system, it must respond to changes proposed by the CSU. A revision to EO 595 has been drafted and is anticipated to be presented for endorsement in early 2008. In the absence of more information about such changes, that process is ignored in our discussion. There are a few recommendations however that can be made. We believe that the campus should:

- 1. Develop a clear mission statement for GE.
- 2. Identify and implement a plan for communicating the purpose of GE to multiple constituencies including faculty, staff (especially advisors), community colleges and high school counselors.
- 3. Develop a communication plan that will a clear explanation to students about "why I should take this course"
- 4. Develop a method to communicate changes to the GE program to appropriate parties
- 5. Consider how to improve the catalog statements on majors and general education to better integrate the two.

**Learning outcomes.** A campus wide effort was made beginning in April of 2007 to revisit the current list of learning outcomes in each area, reduce the number of outcomes, gain a campus wide consensus on them, and focus on competency rather than content. A series of workshops were held (one for each GE sub area) in September of 2007 with the objective of examining goals and learning outcomes for each area. These workshops will be continued through academic year 2007 and early 2008 until this goal is reached.

## National instruments

The university regularly administers nationally normed surveys to various campus groups. These include the HERI Freshman, Faculty, and College Student Surveys; the National Survey of Student Engagement; an Alumni Survey; and others. Each of these may have questions relevant to assessment of general education or provide opportunities to add such questions. The committee agreed to examine the results of these surveys to identify information that might help assess the GE program.

### Embedded assessment

Rubrics for evaluating writing and critical thinking have been developed (see Appendix 6). Faculty will be encouraged to use these as embedded assessment tools to monitor performance and progress.

**Portfolio analysis-**the QDOGS group recommended that a portfolio be developed by all students. Such a portfolio can be used to demonstrate a student's competency in the various General Education areas. The general education committee will work with the QDOGS task force on implementation of a portfolio approach to assist in the assessment of general education.

**Course level changes.** Faculty should consider how they would change the course if it was considered as a "terminal" rather than an entry level course. In many cases, GE courses will be the last course students take in the discipline and in addition to providing students with an understanding of the "ways of knowing" and how the field or discipline relates to other academic areas; they should also be tied to the overall education of the student and should connect to the issues of the day. General education courses should offer opportunities for reflection as well as active learning. The General Education committee will review the guidelines/criteria for approving courses to incorporate these into the process. They will also review course syllabi to see how these match up with the model syllabi that have been approved

**Program level changes.** While the purposes of the various areas of the GE program have been established by the CSU, we wish to assess whether or not the purpose(s) articulated for each of the areas is clear, widely known, and supported. We will conduct a survey of faculty, advisors, and students to answer these questions. Based on the results, we may wish to develop a communication plan or suggest modifications to the CSU statewide academic senate. In addition, a revision to Executive Order 595 is expected in early 2008. The committee will need to review these changes and make necessary changes to the current GE patter to reflect those changes.

**Delivery mechanisms.** GE courses have been delivered in lecture, laboratory and activity formats and in recent years on-line. Recent efforts have been made to develop learning communities. Little is known about the differential effects of alternative formats in a given course. We will assess the impact of learning communities relative to other delivery mechanisms in specific courses.

## V. Plan for Next Review Period

## A. Recommended Changes to the Mission and Goals of the Program

Convene the faculty teaching in each GE Area to revise the Area objectives and develop common Student Learning Outcomes for approval by the University community. Review GE course proposals for alignment with the accepted Course objectives and SLO's. To be completed Spring 2008.

### **B. Effectiveness of Instructional Program**

# **1. Student Learning Outcomes as Developed in the Program's Student Outcomes Assessment Plan (SOAP)**

The SOAP will include the SLO's developed from the GE faculty groups, as approved by the Faculty Senate. Each Area within GE will be asked to create an assessment plan, which will then be aggregated and modified for consistency by the GE committee. After consultation with the Q-DOGS task force the GE committee will explore the use of student portfolios for assessment purposes.

GE courses will be reviewed for inclusion of expected SLO's with supporting learning activities before addition to the GE Area.

## 2. Curriculum

## a. Structure/Coherence of Instructional Program

-The GE program committee will continue review of existing GE courses for alignment with the SOAP developed in the GE committee and approved by the Faculty Senate. Any revisions to the program required by revisions to EO 595 expected in 2008 will be made and incorporated into the SOAP.

-The GE program committee will monitor the existing areas of GE for student enrollments to ensure sections are available to meet enrollment demands.

### b. Cooperative Efforts with Other Academic Programs-Joint Degrees, Services Courses, General Education Courses

-GE Committee will seek methods to foster learning communities within the GE course Areas to promote the achievements of this instructional design established by Fresno State institutional research.

-Service Learning will be encouraged within the GE curriculum courses.

## 3. Recruitment, Retention, and Student Services

-The GE committee will seek methods to provide equal opportunity for all courses in GE to recruit an adequate number of students to maintain the course offerings

-The GE program committee will continue review of existing GE courses for retention of enrolled students and make recommendations subsequent to the findings on retention.

4. Community Interactions (Professional, Disciplinary, Industry/Regional)

-GE Committee will ask for information from the CAN [Campus Advisors Network] about the perceptions of the Fresno State GE program

## C. Resources

## 1. Financial/Budgetary

-The committee will seek annual funding for development of persons serving on the committee to further the functions and quality of the GE program -The committee will seek a method to establish a central location for development materials of use for GE course proposers and committee members.

## 2. Faculty/Staff

## a. Adequacy and Availability

-The GE Committee will seek full membership for the committee representing all elements of the University community.

## b. Professional Development/Travel Support

-The committee will seek annual funding for development of persons serving on the committee to further the functions and quality of the GE program

-The committee will identify, with administrative assistance, appropriate opportunities for committee members to attend professional development aligned with GE initiatives

## **3. Implementation and Currency of Technology**

-The GE committee will foster technology use by GE faculty and GE courses.

## 4. Other:

## a. Space-Classrooms, Laboratories, Offices

The GE committee will review course proposals, and current courses for adequate environments for teaching and learning in GE.

## **b.** Library Assets

The GE committee will meet with Library staff to determine adequacy of the resources and methodologies to acquire materials in support of the GE program

## V. Additional Issues

## References

- AAC&U. <u>College Learning for the New Global Century, a Report from the National</u> <u>Leadership Council for Liberal Education & America's Promise</u>. Washington, D.C., 2007.
- Academic Senate, California State University, Fresno. "General Education Program Description". 2000. (May 9, 2005). <<u>http://www.csufresno.edu/academics/policies\_forms/general\_education/GEProc</u> <u>ess.11.22.05.htm></u>.

Bok, Derek. <u>Our Underachieving Colleges</u>. Princeton: Princeton University Press, 2006.

QDOGS Task Force. "An Interim Report on the Qualities Desired of Graduating Students, at the California State University, Fresno." (2007).

- Appendix 1. The GE Program as approved by the Academic Senate
- Appendix 2. QDOGS Interim Report
- Appendix 3. GE Enrollment data by area for fall 2005 fall 2007.
- Appendix 4. Data on Delivery of GE Program-Instructor rank
- Appendix 5. High Risk Courses
- Appendix 6. Rubrics-Writing and Critical Thinking.

## Appendix 1. General Education Program Description

California State University, Fresno's General Education Program is an introduction to the breadth and depth of the dynamics of human experience. It provides students with a foundation in the liberal arts and sciences and prepares them for specialized study in a particular discipline or program.

The overall objective of General Education is to create a context wherein basic skills are developed and strengthened, scholarship and disciplined thinking emerge, awareness and reflection occur, and ultimately--the integration of knowledge begins.

#### Foundation, Breadth, and Integration

The General Education Program is an integrated curriculum of courses organized into three phases:

**Foundation** (Area A and Subarea B4), is the basic foundation of a student's university education and consists of courses in fundamental skills and knowledge.

**Breadth** (Subareas B1, B2, B3, C1, and C2, and Areas D and E) exposes students to a variety of disciplines within a structured framework that develops knowledge and skills representative of all areas of human endeavor.

**Integration** (Upper division courses in Areas B, C, and D) concludes the General Education Program by providing an integrative or interdisciplinary experience at the upper-division level in which the skills and knowledge developed in Foundation and Breadth are integrated, bringing their interrelationships into focus.

#### General Education Area A Communication in the English Language and Critical Thinking

#### **Executive Order Goals and Objectives**

**Executive Order 595** requires a minimum of 6 semester units in the English language, to include three units from Oral Communication and three units from Written Communication. Instruction approved for fulfillment of the requirement in communication is to be designed to emphasize the content of communication as well as the form and should provide an understanding of the psychological basis and social significance of communication, including how communication operates in various situations. Applicable course(s) should view communication as the process of human symbolic interaction focusing on the communicative process from the rhetorical perspective: reasoning and advocacy, organization, accuracy; the discovery, critical evaluation and reporting of information; reading and listening effectively as well as speaking and writing. This must include active participation and practice in written communication and oral communication.

**Executive Order 595** requires a minimum of 3 semester units of critical thinking. Instruction in critical thinking is to be designed to achieve an understanding of the relationship of language to logic, which should lead to the ability to analyze, criticize, and advocate ideas, to reason inductively and deductively, and to reach factual or judgmental conclusions based on sound inferences drawn from unambiguous statements of knowledge or belief. The minimal competence to be expected at the successful conclusion of instruction in critical thinking should be the demonstration of skills in elementary inductive and deductive processes, including an understanding of the formal and informal fallacies of language and thought, and the ability to distinguish matters of fact from issues of judgment or opinion.

#### Oral Communication (A1) and Written Communication (A2)

All courses must, in addition to congruence with the Area A goals and objectives, observe the appropriate subarea specifications.

#### A1 and A2 Specifications

All courses must include all of the following elements:

- 1. Emphasize the form and the content of communication.
- 2. Provide an understanding of the theory of human symbolic interaction in a variety of contexts and situations, including psychological and social significance of communication.
- 3. Provide theory and practice in the canons of effective communication: discovering ideas and arguments, including advocacy and reasoning with evidence; organization of ideas and arguments; clear, appropriate, and creative use of language; and preparation for and techniques of extemporaneous delivery and critical evaluation and reporting of information.
- 4. Provide theory and practice in effective listening and/or criticism of oral or written communication.
- 5. Require students to prepare at least three major oral presentations or at least six written presentations which will receive oral or written critiques by the instructor. For A2 courses, at least one written presentation must utilize a manual of style for preparing a term paper.

#### **Critical Thinking (A3)**

All critical thinking courses must observe the subarea goal, objectives and specifications.

#### Specifications:

All courses must include all of the following elements:

- 1. Provide theory and practice in reaching factual or judgmental conclusions based on sound inferences drawn from unambiguous statements of knowledge or belief.
- 2. Provide theory and practice in identifying the relationship of language and logic.
- 3. Provide theory and practice in the structure of informal arguments and development of deductive and inductive reasoning skills with oral or written critiques by the instructor.
- 4. Provide theory and practice in identifying and distinguishing the most common formal and informal fallacies of language and reasoning with oral or written critiques by the instructor, and
- 5. Provide theory and practice in identifying and providing examples of the role of critical thinking in society.

It is expected that courses from a number of different departments and disciplines shall meet these guidelines. To ensure adequate coordination of standards and satisfaction of these guidelines, the coordinating committee for subarea A3 (Critical Thinking) (See General Notes for Area A, #2, below) shall be made up of all the Critical Thinking instructors.

- 1. This committee shall meet regularly, at least once a semester.
- 2. In order to keep informed about issues related to teaching Critical Thinking, the coordinating committee shall maintain an on-going collaboration with the Center for the Enhancement of Teaching & Learning, the Statewide Critical Thinking Council, and with other such bodies whose goal is to keep the teaching of Critical Thinking at the state of the art.
- 3. All syllabi for Critical Thinking courses (i.e., courses offered for General Education credit under subarea A3) must be reviewed by the coordinating committee.

- 4. The coordinating committee shall compile and maintain a test bank of questions appropriate for Critical Thinking courses.
- 5. In order to provide appropriate assessment of student achievement in Critical Thinking courses, at least one hour of the final exam in Critical Thinking courses shall consist of questions from the test bank compiled by the coordinating committee. Acceptable format for questions will be determined by the coordinating committee. All instructors may submit questions for this test bank, but the coordinating committee will have the ultimate say in determining acceptability of questions.

#### **General Notes For Area A**

- 1. Courses in Area A must meet the current mode and level standards set for lecture discussion courses. Larger class size may be permitted based on the ability of the course to meet the criteria and by outcome assessment measures (see note 2). Exceptions to the enrollment size limits will be considered by the General Education Committee if they are consistent with the interactive, active learning model of lecture/discussion (C4) courses. Small enrollment may be necessary to achieve the required objectives in some courses, while labs, break-out groups, or other means of providing individual student-instructor communication and feedback may work well in other courses. In some courses, enrollment may be limited by available facilities (i.e. computer stations). While differences in pedagogy and methodology exist between and within instructors, departments, and schools, course (enrollment) size is an important consideration in achieving educational objectives.
- 2. To help ensure that all courses satisfying the Area A requirement are adequately directed towards achieving the stated objectives of Executive Order 595, and to provide reasonable assessment of fulfilled goals, faculty involved in the teaching of each subarea (A1, A2, and A3) will form a coordinating committee for that subarea. Each coordinating committee will keep informed about issues related to teaching in that area, coordinate content and evaluation standards for the courses, review syllabi from all sections of the courses, and be responsible for appropriate assessment of the skills being taught.
- 3. No General Education credit will be given for any Area A course in which the student received less than a "C" grade.
- 4. These courses are part of the foundation for the student's university education. Students must complete all Area A courses by the time they have completed 30 semester units. If students fail to complete successfully (C or better) any of the courses in this area, they must continuously register for an appropriate course until they remediate that deficiency.
- 5. All courses in subareas A1, A2, and A3 must be lower division.
- 6. Courses in each subarea of Area A (Foundation) must have substantially similar goals and content.

#### General Education Area B Physical Universe and Its Life Forms

#### **Executive Order Goals and Objectives**

**Executive Order 595** requires a minimum of 12 semester units in Area B, to include three units from Physical Science (B1), three units from Life Science (B2), including mandatory laboratory activities (referred to as B3), and three units of quantitative methods (B4). Three upper division Area B units are also mandated. Instruction approved for the fulfillment of this requirement is intended to impart knowledge of the facts and principles which form the foundations of living and non-living systems. Such studies should promote understanding and appreciation of the methodologies of science as investigative tools, the limitations of scientific endeavors: namely, what is the evidence and how was it derived? In addition, particular attention should be given to the influence which the acquisition of scientific knowledge has had on the development of the world's civilizations, not only as expressed in the past but also in present times. The nature and extent of laboratory experience is to be determined by each campus through its established curricular procedures.

All courses must, in addition to congruence with the Area goals, objectives and specifications, observe the appropriate subarea specifications and purpose.

#### Physical Science (B1)

Purpose: To understand and actively explore fundamental principles in the Physical Sciences and the methods of developing and testing hypotheses used in the analysis of the physical universe.

#### Specifications:

- 1. Physical Science courses must provide instruction in the fundamental principles and methods of the science being studied, and the development and testing of hypotheses; and
- 2. Instruction in the Physical Sciences must involve understanding and active exploration of the fundamental principles which govern the materials of the physical universe as well as the distribution of those materials and the processes applicable to them, together with an understanding of and ability to employ the experimental and mathematical methods used in science.
- 3. General education courses in the Physical Sciences must engage students in understanding the fundamental principles and laws of Physical Science, exploring the analytical and quantitative methods of inquiry, and clearly demonstrating the use of the scientific method. Students should exit these courses with clear insight into what science is, its methods, and its limits of inquiry.
- 4. The university requires that its general education instruction in Physical Science utilize and emphasize the physical principles and math necessary for complete understanding of the analytical techniques utilized in scientific inquiry.
- 5. Courses in B1, the physical sciences must:
  - a. Explore the content and methodology of the Physical Sciences, including the necessity of math in much of its methodology.
  - b. Teach students how to critically evaluate information presented as "scientific" (i.e., expose students to the different types of empirical inquiry).
  - c. By using tools of science, encourage students to enter into major scientific debates that affect our democratic society, economic systems, and our quality of life, e.g., nuclear power, genetic engineering, the purity of our drinking water, environmental issues, and science education. Students should learn how to develop informed judgments, and therefore be able to influence societal views about science technology.
  - d. Examine the structure and implications of major scientific disputes in their historical context.
  - e. Include discussion of ethical issues.
  - f. Strive to develop a lasting curiosity and sense of wonder in the universe by actively engaging students in the scientific process.

*Note:* All courses in B1 Physical Science must make use of the knowledge and skills students learn in the B4 courses. Therefore all students must complete the B4 Quantitative Reasoning requirement or be concurrently registered for precalculus or beyond prior to completing the B1 Physical Science requirement.

#### Life Science (B2)

**Purpose:** To understand basic concepts of living things, the nature of scientific knowledge, and the relevance of biological knowledge to human affairs. Courses in Life Science must provide:

#### **Specifications:**

- 1. Instruction in the fundamental principles and methods of the biological systems being studied, and the development and testing of hypotheses; and
- 2. Instruction in the fundamental features and unifying theories of living things, including the chemical and physical bases of life and the relationships between living and nonliving materials; or

3. Instruction pertaining to a substantial rather than a narrowly limited number of organisms; or a linkage among the biological sciences to further the understanding of human behavior.

#### Laboratory Activity (B3)

1. Integral laboratory components must be associated with all courses in Subareas B1 and B2.

#### Quantitative Reasoning (B4)

#### **Executive Order Goals and Objectives**

Executive Order 595 requires a minimum of 3 semester units of quantitative methods to include inquiry into mathematical concepts and quantitative reasoning and their applications. In specifying inquiry into mathematical concepts and quantitative reasoning and their application, the intention is not to imply merely basic computational skills, but to encourage as well the understanding of basic mathematical concepts.

#### **Specifications:**

- 1. All courses offered in Quantitative Reasoning must have a prerequisite of at least Intermediate Algebra, and must use a level of mathematics beyond that of Intermediate Algebra.
- 2. In addition the following four conditions must be met:
  - a. A course should attempt to explain the function of mathematical language and formal reasoning, using a range of examples from a variety of diverse disciplines and provide the appropriate practice, and
  - b. It must demonstrate and provide practice in a variety of methods, such as, for example, the use of abstract symbols, numerical techniques, logical reasoning, geometry, etc., and
  - c. It must aim at developing the student's ability to comprehend and utilize the power and broad utility of the quantitative models presented, rather than merely teaching computational algorithmic and statistical skills, and
  - d. It should provide, as required of other courses in Area B, some historical perspective on the role which the mathematical approach has played in development of human knowledge and of our understanding of the world.

#### **General Notes For Area B**

- 1. Courses in Subarea B4 must meet the current mode and level standards set for lecture-discussion courses. Larger class size may be permitted based on the ability of the course to meet the criteria and by outcome assessment measures (see note 2). Exceptions to the enrollment size limits will be considered by the General Education Committee. Small enrollment may be necessary to achieve the required objectives in some courses, while labs, break out groups, or other means of providing individual student-instructor communication and feedback may work well in other courses. In some courses, enrollment may be limited by available facilities (i.e., computer stations). The General Education Committee recognizes that while differences in pedagogy and methodology exist between and within instructors, departments, and schools, course (enrollment) size is an important consideration in achieving educational objectives.
- 2. To help ensure that all courses satisfying the subarea B4 requirement are adequately directed towards achieving the stated objectives of Executive Order 595, and to provide reasonable assessment of fulfilled goals, there will be an exit exam developed and administered by all instructors teaching in this Subarea. This exam must have at least 50% common content and format. Calculus level courses shall have their own exit exams.
- 3. Courses in subarea B4 (Quantitative Reasoning) must have substantially similar goals.

- 4. No General Education credit will be given in any B4 courses in which the student received less than a "C" grade.
- 5. Courses in B4 are part of the foundation for the student's university education. A student must complete a B4 course by the time the student has completed thirty (30) semester units. If students fail to complete successfully (C or better) a course in this subarea, they must continuously register for an appropriate course until they remediate that deficiency.
- 6. All courses in B1, B2, and B4 must be lower division.
- 7. Area B also requires 3 upper division units in Integration. See "Guidelines and Procedures for General Education Proposal Submission" and "Policies for Inclusion of General Education Courses" for additional requirements.

#### General Education Area C Arts (Art, Dance, Music, Theatre) and Humanities (Literature, Philosophy, Foreign Languages)

#### **Executive Order Goals and Objectives**

Executive Order 595 requires a minimum of 12 semester units in Area C to include at least 3 units in the Arts (Art, Dance, Music, Theatre) (C1) and at least 3 units in Humanities (Literature, Philosophy, Foreign Languages) (C2). Three upper division units are also mandated.

Instruction approved for the fulfillment of this requirement should cultivate intellect, imagination, sensibility and sensitivity. It is meant in part to encourage students to respond subjectively as well as objectively to experience and to develop a sense of the integrity of emotional and intellectual response. Students should be motivated to cultivate and refine their affective as well as cognitive and physical faculties through studying great works of the human imagination, which could include active participation in individual aesthetic, creative experience. Equally important is the intellectual examination of the subjective response, thereby increasing awareness and appreciation in the traditional humanistic disciplines such as art, dance, drama, literature and music. The requirement should result in the student's better understanding of the interrelationship between the creative arts, the humanities and self.

All courses must, in addition to congruence with the area goals, objectives and specifications, observe the appropriate subarea specifications and purpose.

#### Arts (Art, Dance, Music, Theatre) (C1)

**Purpose:** To develop an appreciation and understanding of and to stimulate imagination and creativity through study and participation in art, dance, music, theatre.

#### Specifications:

Courses in the arts (C1) must promote the:

- 1. Awareness and understanding of shape, surface, mass, pattern, and/or sound as elements in art; and
- 2. Development of the capacity to experience art at many levels of response including intellectual, emotional, physical and cultural through studying significant works of the human imagination (the study may include active participation in individual aesthetic, creative experience); and
- 3. Awareness of the universality of art, as well as the understanding of art in a cultural context.

#### Humanities (Literature, Philosophy, Foreign Languages) (C2)

**Purpose:** Through the study of the humanities (Literature, Philosophy, Foreign Language), to understand, appreciate, and analyze the meaning of our civilization, its cultural background, and the nature and role of language. To study the humanities (Literature, Philosophy, Foreign Language) from a variety of historical perspectives and cultures by analyzing individual works.

#### **Specifications:**

Courses in the humanities (C2) must:

- 1. Promote an understanding of the development of contemporary civilization through studies of its historical roots in the principal humanistic endeavors, e.g., literature, philosophy, and foreign languages.
- 2. Reflect critically and systematically on questions concerning beliefs, values and the nature of existence; or
- 3. Include a survey of the various types and styles of literature from a variety of historical perspectives and cultures, including instruction in the techniques of literary criticism, or
- 4. Foster skills in listening, speaking, reading and writing a language other than English within a cultural and artistic context.

*Note:* Studies in these areas should include exposure to diverse Western and non-Western cultural perspectives.

#### **General Notes for Area C**

- 1. Students must take a minimum of three units in the arts (Art, Dance, Music, Theatre) and a minimum of three units in the humanities (Literature, Philosophy, Foreign Languages).
- 2. No more than six units from any one department or program may be applied to the area requirements.
- 3. All courses in Subareas C1 and C2 must be lower division.
- 4. Area C requires 3 upper division units in Integration. See "Guidelines and Procedures for General Education Proposal Submission" and "Policies for Inclusion of General Education Courses" for additional requirements.

#### General Education Area D Social, Political, and Economic Institutions and Behavior, Historical Background

#### **Executive Order Goals and Objectives**

Executive Order 595 requires a minimum of 12 semester units in Area D, dealing with human social, political, and economic institutions and behavior and their historical background. Instruction approved for fulfillment of this requirement should reflect the fact that human social, political and economic institutions and behavior are inextricably interwoven. Problems and issues in these areas should be examined in their contemporary as well as historical setting, including both Western and non-Western contexts.

Executive Order 405 delegates to the individual CSU campuses authority regarding graduation requirements in United States History, Constitution, and American Ideals and makes optional the inclusion of these requirements in a General Education program. The campus "Plan for the "90s" encouraged an international aspect to each student's education and supported study that will foster an environment in which students learn to live in a culturally diverse and changing society. Finally, the CSU statewide Academic Senate has argued that campuses must ensure that students are prepared to function in an international, multicultural society.

All courses must, in addition to congruence with the area goals, objectives and specifications, observe the appropriate subarea specifications and purpose.

Purpose: To understand and analyze the basic principles underlying human social behavior.

#### Specifications:

Courses in Social, Political, and Economic Institutions and Behavior, Historical Background must:

- 1. Introduce students to the methodologies and analytical concepts necessary to evaluate society today and promote more effective participation in the human community; and either
- 2. Study the influence of major social, cultural, economic and political forces on societal behavior and institutions; or
- 3. Provide an understanding of different cultures and ethnic diversity through the use of comparative methods and a cross-cultural perspective.

Given the mandates of E.O. 595 and 405, Area D will contain 15 units, divided as follows:

- 1. Six lower division units that ensure that students acquire knowledge and skills that will help them to comprehend the workings of American Democracy and of the society in which they live to enable them to contribute to that society as responsible and constructive citizens. Courses satisfying this requirement shall provide for comprehensive study of American history and American government including the history of historical development of American institutions and ideals, the Constitution of the United States and the operation of representative democratic government under that Constitution, and the processes of state and local government.
- 2. Three lower division social science units selected from the subject areas of Anthropology and Archeology, economics, ethnic studies, gender studies, geography, history, political science, government, and legal institutions, psychology, sociology and criminology, interdisciplinary social or behavioral science. Courses approved to meet this requirement must introduce students to the methodologies and analytical concepts necessary to evaluate society today and to promote more effective participation in the human community; or study the influence of major social, cultural, economic and political forces on social behaviors and institutions.
- 3. Area D also requires 3 upper division units in Integration that expose the students to the diversity of the social sciences. See "Guidelines and Procedures for General Education Proposal Submission" and "Policies for Inclusion of General Education Courses" for additional requirements.
- 4. Three upper division units, which ensure that students are prepared to live in an international multicultural world. Each student must take one course that prepares the student to function in an international multicultural society or that addresses the roles of specific cultures or subcultures, ethnic groups, or gender in contemporary America. If the course has an international focus, it must contain a comparison of that culture to other cultures as well as to American society. Every course that meets this requirement must contain relevant course content in such areas as discrimination and stereotyping.

*Note:* No student may take more than two courses from a single department or program to satisfy the requirements of Area D. No single course can be used to meet the requirements of both (3) and (4) above.

#### General Education Area E Lifelong Understanding and Self-Development

#### **Executive Order Goals and Objectives**

Executive Order 595 requires a minimum of three semester units in study designed to equip human beings for lifelong understanding and development of themselves as integrated physiological and psychological entities. Instruction approved for fulfillment of this requirement should facilitate understanding of the human being as an integrated physiological, social and psychological organism. Courses developed to meet this requirement are intended to include selective consideration of such matters as human behavior, sexuality, nutrition, health, stress, key relationships of humankind to the social and physical environment, and implications of death and dying. Physical activity could be included, provided that it is an integral part of the study described herein.

All courses must, in addition to giving significant attention to a number of the issues or aspects of living mentioned in the area objectives and specifications, observe the appropriate subarea specifications and purpose.

**Purpose:** To equip human beings for lifelong understanding and development of themselves as integrated physiological and psychological entities.

#### Specifications:

Courses in Lifelong Understanding and Self-Development must promote:

- 1. An understanding of linkages among the physiological, sociological and psychological functions of the topics addressed in the course; and either
- 2. An understanding of changes in the above functions during the lifespan of the individual; or
- 3. Experiences which integrate activity and theory to heighten the student's awareness and understanding of life-long potentials for creativity and growth which may include alternative methods (such as non-verbal, non-linear, kinesthetic) of perception, learning, and problem solving.

*Note:* Course content must give significant attention to a number of the issues or aspects of living mentioned above. "Selective consideration" as used in the objective statement should be construed as meaning giving significant attention to a significant number of the issues or aspects of living mentioned in the area goals, objectives or specifications. The language of the objective statement makes clear that physical activity or skills acquisition alone cannot meet this requirement. Thus such content should be integrated into courses with broader purpose or the amount of such credit applicable to the requirement should be limited.

## **Area A-E General Notes**

Courses in each Foundation subarea must have substantially similar goals and content.

- 1. All areas and subareas must contain a substantial number of 3 unit courses in order to assure that students do not face a *de facto* increase in the minimum required General Education units.
- 2. Only rarely shall departments or programs have courses in more than one General Education Area B, C, D, or E
- 3. A student must complete the lower division course requirements before receiving upper division Integration course credit in that same area.
- 4. The Academic Senate endorses the findings and recommendations of the General Education Review Group #5 on Campus Exceptions (contained in *Academic Senate Minutes, February 29, 1988, attachment #2* and *General Education Review Bulletin, No. 2*, approved by President Harold Haak, March 2, 1988). The recommendations have not been fully implemented. The Academic Senate recommends the creation of guidelines and procedures for exceptions during a review of campus exceptions.
- 5. A maximum of two courses from one department or program may be applied to satisfy the Breadth requirements. However, a department or program may prohibit any Breadth course from simultaneously satisfying its own departmental or programmatic requirements.

#### **Guidelines and Procedures for**

#### **General Education Proposal Submission**

- I. Guidelines for Course Submission
- A. Guidelines for Lower and Upper Division Proposal Submission

General Education course proposals should include the following:

- 1. A title.
- 2. A brief description (catalog entry).
- 3. An indication of prerequisites.
- 4. A justification of the course, as meeting the goals, criteria, and specifications of General Education (Areas A-E as required) as well as the applicable sections of *Policies for Inclusion and Evaluation of General Education Courses*. Upper division courses require an explanation of the manner in which the course integrates area and subarea goals and objectives.
- 5. Frequency of course offering.
- 6. Additional operating money required beyond present levels.
- 7. Additional instructional equipment required.
- 8. Course syllabus for each section taught should normally include:
  - a. Name of the instructor, office location, telephone number.
  - b. Course title and number, number of units, and brief course description.
  - c. Course objectives.
  - d. Course calendar with approximate dates, deadlines, and/or periods of time for topics, readings, projects, exams, etc.
  - e. Course requirements and basis for final grade.
- 9. Textbooks, equipment, etc.
- 10. Specific writing or performance requirements (typical paper assignments, research projects or performance requirements).
- 11. The approval of the departments involved, the school curriculum committee, and the school dean.

## **B.** Guidelines for Interdisciplinary Course Submission

Interdisciplinary courses, designated IntD, will contribute to the goals of General Education.

- 1. All interdisciplinary courses must be upper division and are listed separately in the catalog. They are not listed as, nor considered to be, departmental offerings.
- 2. Interdisciplinary courses should be designed to provide avenues for integration of the skills and knowledge imparted in Foundation and Breadth.
- 3. Justification of the course, as meeting the goals, criteria, and specifications of General Education (Areas B-D as required) as well as the applicable sections of "Policies for Inclusion and Evaluation of General Education Courses." Upper division courses require an explanation of the manner in which the course integrates area and subarea goals and objectives.
- General Education encourages proposals involving faculty from all instructional areas. Ordinarily
  one of the proposers should be from the schools of Arts and Humanities, Natural Sciences, or
  Social Sciences.
- 5. Interdisciplinary courses may be team taught by faculty from at least two different departments, programs, or schools.
- 6. When two faculty are involved in the development and teaching of a specific interdisciplinary course, each will receive one-half of the appropriate WTU for the course as direct instruction WTU, and one-half of the appropriate WTU as Provost/Vice President for Academic Affairs assigned time WTU.
- 7. All courses should require a written paper, research project, or performance equivalent.
- 8. All IntD courses, including service-learning courses, must be identified with Area B, C, or D.

#### II. Procedures for Course Submission

#### A. Procedures for Submitting New Course Proposals

A request for a course to be added to the General Education Program is made through the submission of an *Undergraduate GE Course Proposal* form. Following a substantive review of the request by the department, appropriate school committee, and approval by the school dean, the request is submitted to the General Education Committee through the Provost or Provost's designee. Proposals must be approved by the General Education Committee as well as the Provost or Provost's designee. If approved, the course is incorporated into the next year's catalog, and it may be scheduled for offering during the academic year covered by the catalog. Existing courses for General Education do not need to be submitted to the Undergraduate Curriculum Subcommittee.

The procedures for submission of new General Education courses to each school are as follows:

- 1. The school committee will examine the quality of each proposal and shall forward to the dean a list of proposed courses *along with the rationale* containing the comparative merits of each course in relation to the area and subarea.
- 2. The dean shall review the proposals as well as the recommendations of the department and school committee. If the dean does not agree with the recommendations of the school committee the dean shall attempt to reconcile those differences within the school.
- 3. The dean shall make a final decision on each proposal and shall notify, in writing, each department of that decision.

#### B. Procedures for Submitting Proposed Changes in Existing GE Courses

Deletions or changes in existing courses involving unit value, lecture/laboratory format, distance/mediated learning, prerequisites, class size, content, and title or description are requested on the *Undergraduate GE Course Change Request* form. Following a review of the request (substantive or procedural, as required) by the department, review and recommendation by the appropriate school committee, and approval by the school dean, the request is submitted to the General Education Committee through the Provost or Provost's designee. If approved, the course is incorporated into the next year's catalog, and it may be scheduled for offering during the academic year covered by the catalog.

The procedures for school submission of existing course proposals are as follows:

The procedures for existing course proposals shall be the same as those described for new course proposals with the understanding that the depth of the review is contingent upon the extent of the proposed change.

## C. Procedures for Submitting Interdisciplinary Course Proposals

A request for an interdisciplinary course to be added to the General Education Program is made through the submission of an undergraduate General Education course proposal form. Following substantive review of the request by the departments, appropriate school committees, and approval by the school deans, the request is submitted for review to the General Education Committee through the Office of the Provost or the Provost's designee. All proposals must include a justification of the course as a legitimate interdisciplinary offering consistent with Area goals.

#### Notes:

1. When a new course or a proposed change affects another program or department, it must be cleared by the affected program or department. Such clearance, as evidenced by the appropriate signatures on the request form, must be secured by the department requesting the change. If clearance is denied, then resolution of the issues can be sought before the General Education

Committee. If a change affects other courses or programs within the department making the request, the necessary adjustments should also be indicated on the form. Information on current course interrelationships may be obtained from the Provost or Provost's designee.

- 2. The General Education Committee will be responsible for recommending to the Provost or Provost's designee amendments to the list of courses included in the General Education Program.
- 3. All courses in General Education must be resubmitted and reapproved every five years during a review performed by the General Education Committee to ensure the courses continue to meet the objectives and intent of the program.

#### Policies for Inclusion and Evaluation of

#### **General Education Courses**

## I. Goals Guiding General Education

The General Education Program expands the student's intellectual horizons, fosters lifelong learning, prepares them for further professional study and instills within them an appreciation of cultures other than their own. The University will remain committed to providing a quality general education experience for all students and make it clear that such an experience is the foundation of all applied and professional programs.

## **II.** Criteria for Evaluation

#### A. Criteria Applying to All Areas

Courses proposed for, or under review in, General Education are expected to meet the following criteria:

- 1. Courses in General Education are grounded in the Liberal Arts and Sciences, through professional courses that meet the guidelines may be included.
- 2. Courses must cover the subjects by exploring major ideas, themes, and concepts consistent with the intent of the subarea goals, objectives and specifications. The area goals, objectives, and specifications should be integrated into the course in meaningful way.
- 3. Faculty must assign to students and incorporate into their General Education courses significant non-textbook readings. As the readings assigned vary from dense research articles to comparatively lighter popular books, the number of pages assigned should provide students an opportunity for sustained reading that enhances their command of language, rhetoric, and argumentation.
- 4. A course may only use prerequisites which are also in General Education, though courses may require work normally completed in high school to meet CSU admission requirements.
- 5. The General Education Writing Requirements must be integrated into each course.

## B. Criteria Applying to Integration Upper Division Courses of Areas B, C, and D

These courses are designed to provide opportunities for the student to discover a variety of ways in which specific areas of human knowledge are related.

All upper division Integration courses must:

1. Be congruent with an Area (B, C, or D) goal, as well as the appropriate subarea purpose, objective(s) and specification(s).

- 2. Be integrative, aiming toward a genuine appreciation of the linkages among subareas as well as the area goal.
- 3. Be taken outside the student's major department unless the course is part of an interdisciplinary package between two or more areas.
- 4. Have a 2,000 word iterative writing requirement.
- 5. Be limited to the maximum enrollment allowed for lecture/discussion classes but not to exceed 50 students in any section. Exceptions may be granted by the General Education Committee in consultation with the appropriate departments if:
  - a. A larger class can be shown to satisfy the goals and objectives of upper division General Education,
  - b. The larger class size will not create an imbalance in the distribution of enrollment in an area that adversely affects the other participating courses in the same area (for example, by decreasing their enrollment so that their contribution to the area is incidentally reduced),
  - c. The exception must be renewed every two years to ensure that the General Education Committee has the opportunity to gauge the impact of large sections on the area.
- 6. Be taught at least once in four consecutive semesters or be dropped from the list of General Education upper division Integration offerings.
- 7. Be submitted for review every five years or be dropped from the list of General Education courses.

**Note**: A student must satisfy at least one subarea before receiving credit for an upper division course in the parent area.

## C. Area Enrollment Management Criteria

The following ensures that area offerings maintain a breadth of alternatives:

- 1. Courses should be offered in a sufficient balance within each area (B, C, D and E) so that students have a choice among a solid range of courses in each area. The distribution of course sections and enrollment in sections of each area shall be monitored by the General Education Committee.
- School curriculum committees, school deans, and the Provost or Provost's designee shall support the goals of breadth in each area by assuring that no individual course is offered with sufficient frequency (for example, through a large number of sections or multiple sections of large classes) as to dominate the enrollment in the area.
- 3. If necessary to restore enrollment diversity in an area, upon the recommendation of the General Education Committee, schools that allow multiple sections of a course to dominate the distribution of enrollment in an area may be restricted by the Provost or Provost's designee with regard to the number of sections they may conduct.

#### Approved by Academic Senate 12/1/97 General Education Writing Requirements Approved by Academic Senate on May 9, 2005

#### I. Goals of the General Education Writing Requirement

A. To improve our students' competence in writing clearly and communicating effectively.

- B. To enhance learning of the subject matters represented in the General Education areas by the addition of writing to the other typical methods of interaction with the subject content and other typical methods of evaluation.
- C. To encourage students, through appropriate writing assignments, to take increasingly greater responsibility for their own learning and to engage in disciplined, independent thinking about complex subject matters.
- D. To expose students to the written analytical and critical aspects of the methodologies of the General Education subject disciplines, and to give students an appropriate opportunity to participate in the writing aspect of the methodology of the discipline.
- E. To impress upon students the advantage and power they gain from developing a strong competence in writing, with respect not only to successful and satisfying completion of their university education but also to meeting their own career goals.

## II. Writing Guidelines

A. Every lower division General Education course requires a minimum of 1,000 words of writing in original student text (except for courses used to satisfy the quantitative reasoning requirement). One writing requirement must be a minimum of 3 pages in length on which faculty will provide meaningful, feedback so that students may improve their writing abilities during the course (see II.B. for examples of writing assignments that would meet this requirement). Faculty (not readers, teaching assistants, etc.) should provide ample suggestions for improvement, and in doing so, should consider using the General Education scoring guide for writing developed on campus in 2002. (http://academicaffairs.csufresno.edu/undergrad\_studies/general\_ed.htm)

Note: Class notes taken during the course of the semester cannot be used to satisfy this requirement.

B. Every upper division General Education course requires a minimum of 2,000 words of writing in original student text. A substantial portion of the writing must be handled in one multipage assignment on which faculty will provide meaningful, feedback so that students may improve their writing abilities during the course (see II.B. for examples of writing assignments that would meet this requirement). Faculty (not readers, teaching assistants, etc.) should provide ample suggestions for improvement, and in doing so, should consider using the General Education scoring guide for writing developed on campus in 2002. (http://academicaffairs.csufresno.edu/undergrad\_studies/general\_ed.htm)

Note: Class notes taken during the course of the semester cannot be used to satisfy this requirement.

C. The intent of the requirement is to insure that a significant writing component to which faculty have responded in a meaningful fashion will be included in and integrated into the scheduled assignments.

- 1. At least half of the minimum writing requirement will consist of a sustained, multipage assignments (expository, critical, or both) of a particular subject matter. Such a sustained treatment of a subject matter can take on a wide variety of forms.
- 2. The content of these assignments should be both rigorous in the use and application of the content and methodology of a subject matter, and relevant to the concerns of our students.
- 3. Writing assignments and instructor response to student writing should stress the conventions and expectations of writing in the academic setting as well as in the business and professional world, including attention to audience and purpose, discipline-specific

conventions of style and organization, and mastery of standard grammar and mechanics. Instructor response should reference the General Education scoring guide for writing developed on campus in 2002.

#### III. Clarifications

#### A. Definitions

- 1. "1,000 words" translates into approximately 3½ to 4 double-spaced typed pages (250-300 words per page), varying with margins and size and style of font. "2,000 words" translates into approximately 7 to 8 double-spaced typed pages (250-300 words per page), varying with margins and size and style of font.
- 2. This word-count/page-count refers to total minimum words or pages over the course of a semester.
- B. Interpretation
  - 1. The requirement could be satisfied by a single assignment provided there are multiple drafts with feedback from the instructor.
  - 2. An instructor who judges that a student needs more help in the mechanics of writing than the instructor is able/willing to provide should take the following steps:
    - a. In notifying the students early of deficiencies in their writing skills, the instructor could stress that doing well in the course will require that the student get assistance.
    - b. Inform the student of the offices on campus that provide writing instruction. (See Section V.)
    - c. Some learning assistance labs or writing workshops require very early enrollment.
  - 3. Some examples of writing assignments that would satisfy the writing requirement are:
    - a. An essay on an assigned or student-selected topic, where the goals, structure, and methods of the essay are clearly specified by the instructor
    - b. A complete write-up and analysis of a laboratory experiment
    - c. A report of a data-gathering session (observational or interview-based)
    - d. An ethnography
    - e. An analysis of works of literature in traditional literary genres
    - f. An analysis of the ethical, social, and economic implications of a local or global geologic, geographic, or meteorological trend
    - g. A critique of a current political movement, national or international
    - h. An analysis of a social problem such as racism or sexism in a particular context or locale from a scientifically-based methodology, e.g., sociology, political science, psychology
    - i. An ethical analysis of a contemporary moral problem
    - j. A report of interactions with works of art, music, theatre or dance and
    - k. A description and analysis of the effects of verbal or nonverbal communication upon specific kinds of human relationships; such as those between persons of different sexes, races, or nationalities.
    - 1. Written answers to complex essay questions involving application of a subject matter on an inclass or take-home exam
    - $m. \ \mbox{A full-sentence}$  preparation outline for a major oral presentation.

#### IV. Strategies for Assisting Faculty in the Use of Writing Assignments in General

#### **Education General Education Courses**

#### A. Preliminary comment:

It is the charge and the commitment of the General Education Committee to construct a General Education Program that has maximum possible benefit to our students inasmuch as it provides the foundation of their university experience as an education for life. In addition, the committee is fully aware of the present workload of faculty. Considering all factors, it remains the conviction of the committee that the writing requirement in General Education courses adds significantly to the value of the General Education courses which students are required to take.

In response to well-justified faculty concerns about quality of education and workload pressures, the committee is open to hearing suggestions from faculty and eager to provide assistance and suggestions to faculty toward the goal of successfully meeting the requirement in a way which is truly beneficial to our students and at the same time does not inappropriately burden faculty.

#### B. Constructing writing assignments

1. It is the belief of the committee that one of the best and most creative contributions faculty can make to enhance the value to our students of General Education courses, with respect to satisfying the writing requirement, is in the constructing of exciting and relevant writing assignments. Such an assignment is more interesting to grade as well as more interesting to complete. An assignment can be both exciting and intellectually rigorous. All faculty know that this is so, because we are all directly aware of the intellectual pleasures we experience in the practice of our disciplines. We remember the excitement we felt when we became captivated by our chosen fields and committed our professional lives to them. We surely can construct an assignment that gives our students a glimpse of how our subject discipline can engage the mind and life of a well-educated person and citizen, whether or not the student decides to enter into one's own discipline as a career.

2. Writing assignments should contain a complete description of the components, methodology, and goals of the assignment, as well as the criteria/standards against which they shall be evaluated.

3. Many faculty find journal assignments helpful to the students; and where this is so, such a journal assignment would constitute a partial satisfaction of the General Education writing requirement. Journals comprised primarily of class notes may not be used to meet this requirement. Instructor feedback must be provided throughout the semester.

4. Long before the end of the semester, faculty should comment on and return to students writing assignments or drafts of assignments to insure that students will have the opportunity to improve their writing abilities during the course. Such assignments may take the form of iterative assignments, a portfolio or revised work, or other forms that allow faculty to assess whether feedback has been effective. Faculty are encouraged to utilize resources available through Teaching, Learning & Technology (TLT) to develop appropriate and effective writing assignments for General Education courses.

#### C. Evaluating writing assignments

1. Faculty will structure writing assignments so as to maximize the amount of meaningful feedback students will receive over the duration of the course.

2. Comments and feedback by faculty on writing assignments need not be lengthy, but should be given to students in a timely fashion, so that students have the possibility of improving their writing abilities during the course.

3. The focus of the feedback should be on content, accuracy, completeness, and clarity of expression. Feedback on organization, style, grammar, and mechanical aspects of composition is also necessary. Students should become familiar with the manual style of the course.

4. Instructor response should reference the General Education scoring guide for writing developed on campus in 2002.

(<u>http://academicaffairs.csufresno.edu/undergrad\_studies/general\_ed.htm</u>) The advantages of such an evaluation technique are as follows: it provides a standard against which all papers in a given assignment are evaluated, thus promoting fairness and uniformity in grading; it allows faculty to give comprehensive feedback on all aspects of the assignment quickly and clearly; it gives students an evaluation of the quality of their work on every aspect of the assignment, even if that evaluation is only a check mark in a box on the grid.

5. Positive reinforcement for work well done should always be included in evaluations of assignments, along with the criticism and suggestions for improvement. Consistent with the aims of the requirement, faculty should impress upon students the value of good writing skills. Positive feedback, as well as suggestions for improvement, are essential for providing this encouragement. Ideally, after receiving an evaluation of their writing, students should still want to write and want to write better.

#### V. Sources of Additional Help

- A. For students who need help in basic writing:
  - 1. English Writing Center, c/o Department of English, Ext. 8-0334. Early enrollment typically is required.
  - 2. Developmental Learning Resources Center, drop-in tutorial services (Lab School 137), Ext. 8-3052.
  - 3. University Tutorial Services, Ext. 8-3052.
- B. For faculty:

Annual writing workshops, available to a limited number of faculty by reservation, usually held mid-August. Faculty have rated these workshops as very helpful in several ways, including specific suggestions for the construction of challenging assignments which will meet the writing requirement and the development of evaluation techniques which do not require excessive faculty time.

#### **General Education Committee**

The General Education Committee is a Standing Committee of the Academic Senate.

The Committee consists of thirteen voting members:

1. Faculty: Ten members, each to be elected for a three year term by the University faculty, to represent the entire University. One shall be elected from each of the schools. In addition, two shall be elected from among the schools of Arts and Humanities, Natural Sciences, and Social Sciences with no more than two from any school. In the event of a failure to elect a member, or should a member become unable to serve,
a replacement from the appropriate school shall be appointed by the Executive Committee until such time as the position can be filled by election.

- 2. Students: Two students designated by the Associated Students, Inc.
- 3. Ex-Officio: One representative from the Office of the Provost.
- 4. Chair: The Chair should be nominated and elected from the elected members of the Committee.
- 5. The Committee shall also include one non-voting representative appointed by the Vice President for Student Affairs.

The Committee's responsibilities are as follows:

1. Evaluating and approving courses for inclusion in the General Education program.

A. When evaluating proposed courses the Committee must follow the general statewide requirements of Executive Order 595 as well as the specific local criteria approved by the Academic Senate and the Provost.

B. Course approval shall be based upon the written criteria and upon policy guidelines provided by the Academic Senate as approved by the Provost.

- C. When proposals are rejected by the General Education Committee written reasons will be provided.
  - 2. Coordinating a regularly scheduled review of General Education courses to ensure compliance with General Education policies and guidelines.
- A. All General Education courses will be subject to periodic and detailed review.

B. A course which appears to be in serious violation of General Education policy and guidelines and/or is inconsistent with the approved course proposal, may be reviewed at any time.

- 3. Implementing General Education policy and guidelines as adopted by the University.
- 4. Implementation of General Education guidelines.

A. Courses found in violation of current General Education policies and guidelines (e.g., failure to meet the writing requirements, exceeding enrollment limits, failure to offer courses consistently) as well as courses whose grading significantly deviates from recognized practices are subject to deletion from General Education. The Provost's Office shall issue a notice of violation and identify the remedial action that must be taken and a deadline for compliance. If remedial action is not taken by the date specified, the course will be removed from the General Education program.

B. A failure by Departments/Programs to fully participate in the process of periodic reviews will result in the removal of the subject course from the General Education program.

- 5. Submitting, on a yearly basis, a report on the status and functioning of the General Education program as a whole to the Executive Committee of the Academic Senate.
- 6. Developing and forwarding to the Executive Committee of the Academic Senate recommendations for changes in General Education policy.

#### Appeals/Reinstatement:

1. A department or program may appeal to the Provost a decision by the General Education Committee that a department or program course is in violation of General Education policy. If the appeal is upheld, the matter shall be remanded to the General Education Committee for reconsideration. If the Committee

rejects the decision of the Provost, the appeal shall be forwarded along with the recommendations of the Provost and the General Education Committee to the Academic Senate for final resolution.

2. Courses which have been proposed for inclusion in the General Education program, but have been rejected by the Committee, may be resubmitted no sooner than the following semester. Courses that have been removed from the General Education program may be considered for reinstatement, if requested by the Department/ Program, no sooner than one calendar year from the date of the notice of removal. Reinstatement will be treated in the same way as a new submission.

#### **Exceptions to General Education Requirements:**

- 1. Requests for exceptions to the General Education requirements submitted by high-unit professional degree programs will be received and considered by the General Education Committee.
- A. Academic justifications for such requests are to be presented to the Committee.

B. If the request concerns campus policies alone, the Committee's recommendations, with complete documentation, will be forwarded to the Provost.

C. If the request concerns system-wide policies, the Committee's recommendations, with complete justification, will be forwarded to the Provost for submission to the Chancellor's Office.

2. Individual student requests for exemptions or substitutions shall be received and acted upon by the Student Academic Petitions Committee.

#### Approved by Academic Senate 11/9/98

# Appendix 2.

# An Interim Report on the Qualities Desired of Graduating Students, at the California State University, Fresno February, 2007

Whenever you find yourself on the side of the majority, it is time to pause and reflect. -Mark Twain

It is prudent that from time to time faculty take upon themselves a review of the skills and qualities desired of graduating students. Such a review should also, rightly, include recommendations for methods by which a university might measure such achievement, and policy changes that might help effect the desired results. Our committee was convened for such a task; our suggestions and recommendations follow.

## **1. The Desired Qualities**

Our committee agrees that beyond Engagement, our university should have a unifying theme that permeates and leads our academic mission. Undoubtedly, as the only major undergraduate-focused public university in the San Joaquin Valley, the university has a responsibility to offer a diverse academic program. But it is also clear that, regardless of discipline, there are certain, very general qualities required for success, both in the classroom and on the playing field, both before and following graduation. This recommendation is a summary distillation of desired qualities, which create the acronym PACE (meaning "peace" in Italian and Latin, but also the English word, as in "she's on pace to win the race"):

- P Passion
- A Achievement
- C Courage
- E Engagement

These qualities are to be guided by Ethics. The complete E PACE motto (meaning "from peace" in Latin or "and peace" in Italian) is derived from a number of desired qualities that include, among others: fortitude, agency, motivation, intellectual curiosity, collaboration, confidence, creativity, global awareness/community, tolerance, empathy, and humility.

It will be readily noted that these qualities represent a departure from typical top-ten lists of "most-desired characteristics", which invariably begin with "critical thinking" (i.e., scientific reasoning). The departure is not accidental: 1) such skills are implicit in Achievement, so are subordinate to this higher quality, 2) to name as objectives the acquisition of basic skills, supposedly obtained in a K-12 education, says little for the ideals of anything that might truly be called "higher" education, 3) true success requires more than an acquisition of skills or knowledge, and is better engendered by acquirement of the qualities noted above.

#### Passion

Passion is not easily taught, perhaps difficult to measure, but is nonetheless a critical ingredient for success. Reminder of the need for passion can be seen in a recent report about Fresno's only Rhodes Scholar, Julie Veroff. In reciting her stellar qualities, there was no mention of exemplary writing skills or a high level critical thinking. Instead, friends and relatives described her as a "self-motivated, passionate

student" and explained that school was her "passion." Similarly, anyone following tributes to the recently deceased Nobel Prize winning economist Milton Freedman could not help but note the frequent references to the passion he had for his work. Successful people share the trait of passion; we desire that students use the resources of the university to discover their passions and that professors do all they can to enable such discovery.

# Achievement

Achievement in any discipline is unobtainable without some acquisition of skills and knowledge. But achievement is more than this. True achievement requires work ethic and self-motivation, intellectual curiosity and knowledge, ethics, and wisdom—key attributes of successful students, athletes, and professionals alike.

# <u>Courage</u>

Winston Churchill stated that "Courage is the first of human qualities because it is the quality which guarantees all others," and we do not disagree (only a spelling convention places it third). Additionally, in the *Analects* of Confucius is the maxim, "To see what is right and not to do it is to want courage." Both views are relevant here. Our acronym includes a call to moral courage and highlights an understanding that students will require courage to achieve their highest goals and most noble aspirations.

# Engagement

The quality of engagement denotes a responsibility beyond the personal and is allied to public support for higher education. Thomas Jefferson looked "to the diffusion of light and education as the resource to be relied on for ameliorating the condition, promoting the virtue, and advancing the happiness of man." The committee embraces and incorporates President Welty's establishment of engagement as a university theme, with the view that engagement can lead to achievement with broad value.

# **Ethics**

None of the above qualities have meaning in the absence of Ethics, and a consensus view of the committee is that Ethics must play a prominent role in defining the meaning of a California State University, Fresno education. We hope our students, faculty, staff and administrators aspire to Gandhi's call that "We must become the change we want to see."

# 2. Preliminary Recommendations Regarding Analysis and Assessment

An immediate question is whether any of our desired qualities can be measured: the answer is a qualified "yes." We offer complex qualities, and as might be expected, assessment will similarly be complex. Though our recommended measurements will be difficult, we urge staff, faculty and administrators to exhibit sufficient passion for the true success of our students and the courage to attempt the difficult—because here, what is difficult is also meaningful.

The committee understands that the university will adopt the Collegiate Learning Assessment exam. We welcome the data to be derive from its use. We are also encouraged by our additional understanding that universities will be evaluated more on the change of scores (between the freshman and senior years) as opposed to mean absolute scores. However, we also view standardized tests as only a small component of a suite of larger measures of student success, as outlined below.

# 2.1 Areas of measurement:

If students have acquired the knowledge and skills outlined in GE, and have internalized the E PACE qualities, our university should compare well with other institutions in regard to the following:

1. The rates at which graduating students are inspired to enroll in graduate programs such as Ph.D. programs in the Arts and Sciences, or enrollments in schools of Law or Medicine.

2. Employment rates and self-reports of job satisfaction.

3. Levels of civic engagement, as measured by the National Survey of Student Engagement (NSSE).

4. The rates at which graduating students take the preliminary exams for entry into graduate programs, such as the Graduate Record Exam (GRE), the Law School Admissions Test (LSAT), or the Medical College Admissions Test (MCAT).

5. Student self-evaluations of their attainment or growth in the areas of the E PACE components. (George Kuh endorsed the committee's proposal to formulate a student portfolio as a means of student self-evaluation, and we are debating its form and scope),

It might be noted that we emphasize the rates at which students "do things" over performance on test scores; this emphasis is purposeful. For example, having taken an art history course, our hope is that students would visit museums, become museum subscribers, support public displays of art, or perhaps vote to sustain funding to the National Endowment of the Arts. Such results are of vastly greater consequence than whether students can differentiate a Doric from a Corinthian column. The same could be said of a Natural Science course: if our students begin to recycle, re-think what kind of car they drive, read the newspaper more frequently, are less inclined to top their trees, or more likely to vote in "off-year" elections, or maybe even visit a National Park—these results carry greater weight than whether, several years later, they can sketch the Bohr model of the atom or recognize the chemical formula for calcite.

This is not to say that knowledge is unnecessary—it is essential. But lists of "all the things students must know" are not unlike lists of K-12 educational goals. We reject the notion that our university's GE should recapitulate a high school curriculum. A university education must aspire to something more. To the committee's view, our E PACE qualities are the essential components of a *higher* education—*by definition*.

# 2.2 An assessment of the items noted in section 2.1

The committee is curious as to how we compare to our sister CSU institutions and other 4-year colleges and universities, both public and private. Our hope is that we compare well, but data are needed to consider our relative effectiveness. We recommend that the university undertake a serious study of what makes good colleges and universities "good" (a longitudinal study of the criteria noted in section 2.1 is needed) and aspire to surpass our sister institutions.

# 2.3 Recommendations

Though data are crucial, because thoughtful studies of student success are rare (we are disappointed at the rate at which the U.S. News and World Report standards are adopted, without critical analysis), there are still signs for direction of action.

In a thoughtful examination of undergraduate physics programs, Hilborn and Howes (2003) noted that successful programs were "challenging, but supportive and encouraging" and were leaders in "undergraduate research participation." We thus encourage the university to adopt and continue, where relevant, the qualities of thriving "programs," which have (according to Hilborn and Howes, 2003):

- "well developed...advisement and mentoring," especially regarding career opportunities
- an "undergraduate research program"
- "opportunities for student-faculty interactions"
- "a strong sense of community"
- students acting as "team members in department efforts, such as outreach to the public and K-12 schools"

Their study also noted that the "department is the critical unit for change." Successful departments are willing to experiment with the curriculum, and have a clear "sense of mission," and further, that department efforts engage a "large fraction of the department" (such efforts are not relegated to "junior faculty, adjuncts, or to a few heroic faculty members").

Successful departments are also campus leaders in the sense that administrators reward forward-looking departments. Clearly, administrators and faculty members must share this team spirit.

These results are not isolated to physics departments. Though Loren Pope's book *Colleges that Change Lives* is not a scholarly work, the themes just noted for physics departments recur in Pope's analysis of 40 non-selective colleges that putatively change lives.

Additional committee suggestions include the following:

1. The university could create a University 199 course, which would serve as a "senior" thesis project, to be used by any department on campus that has as yet to create its own research-oriented culminating experience.

2. We might also consider requiring all students to develop a portfolio that illustrates how they have experienced growth in all of the components in our E PACE motto. The E PACE motto might also be tied to department "Road Maps" (e.g., with reminders to students to update their portfolios), to encourage students to make progress in each E PACE component every semester. The committee is now considering how such a portfolio might be structured and evaluated. We envision an electronic component, augmented by physical elements, if necessary.

3. The university should think creatively about how students and faculty interact, and develop forums for both academic and social gatherings. Administrators and faculty might think of creative scholarly/social activities and gentle means by which to encourage participation. Administrators might also examine the reasons for the lack of courses that are team-taught or "linked" and look for remedies.

4. The Hilborn and Howes (2003) study also notes the importance of providing challenges. Assuredly, the "American Idol" approach to student evaluations of teaching is a corrosive agent in this regard; not that student evaluations are to be discarded, but the university should consider the addition (and emphasis) of fact-based rather than opinion-based questions. These questions should be less a function of popularity, and speak more to the nature of the challenges provided to students and the degree of work ethic on the part of the instructor. For example, in addition to current fact-based questions we might ask whether

professors assign and give detailed feedback on iterative writing assignments, or require thoughtful and challenging reading assignments, or assign homework problems involving the use of algebra or statistics. The move from an opinion-based to fact-based evaluations is crucial if we are to reward those instructors who exhibit and expect a strong work ethic and set high standards for their students. We will later elaborate these recommendations, so as to connect student evaluations to E PACE components.

5. We urge the university to adopt E PACE as a "lived philosophy" (to used George Kuh's words) for all campus units, including both academics and athletics. New faculty are perhaps more likely to embrace such a shared philosophy; E PACE might be imbued into the university mindset if it were the theme of new faculty orientation. Similarly, E PACE could be the theme of new student orientations and student recruitment. We might also consider (numerous) university-wide awards for faculty and students who exhibit exceptionally keen E PACE qualities.

6. The GE and UCC committees might also consider whether new or revised courses encourage various of the E PACE components.

# 3. General Education Requirements and Additional Recommendations

A two-fold consensus view of the committee emerged: 1) The present General Education requirements (GE) of the California State University System adequately encompass and describe the major areas of skills and knowledge to be acquired by graduating students. 2) Fundamental skills, such as writing and mathematics should be reinforced in nearly all university classes. We also considered whether the university should require an ethics course. We have tentatively agreed that, like critical thinking, ethics is the domain of all disciplines, and like writing and mathematics, should be reinforced campus wide. However, we also note Derek Bok's (2006) suggestion that a stand-alone ethics course, either embedded within GE, or within the department, might be crucial for success. Bok (2006) warns that in the absence of a stand-alone course, "professors in other disciplines are not trained in ethics and are consequently reluctant to discuss such questions in class. Thus, while embedding ethics throughout the curriculum has often been advocated, the strategy has rarely succeeded in practice." We feel strongly that ethics is the domain of all disciplines and the committee will continue to look for consensus on such a recommendation, as we have reached consensus on the other elements of this report.

In regard to mathematics, we suggest the university consider 1) developing a "Quantitative Rubric," that would include statistical reasoning as a primary component and that may be used by a number of GE courses across campus. The committee developed a rough draft of such a rubric, but to be useful to professors outside the colleges of Engineering and Sciences and Mathematics, it is clear that additional work is needed. 2) Such a rubric could easily be adopted by all GE courses offered in the colleges of Engineering, Science and Mathematics, Agriculture, Social Sciences, Education, Business, and Health and Human Services, and might even find application to areas in Arts and Humanities. 3) Not unrelated the first suggestion is that the university consider a call for designated Q-courses (for Quantitative reasoning). 4) With advisement from the chair of the Mathematics department, the committee also reached a consensus view that the statistical reasoning component that is currently optional in the area B4 course MATH 45 become mandatory.

The committee tentatively recommends no further adjustments to GE. However, in order for E PACE to become a "lived philosophy" these concepts should be incorporated into GE courses in a meaningful way. We appreciate the openness of the GE curriculum, which allows for intellectual exploration—this is key to a university education. For example, we are uncertain that an entire GE section should be devoted to critical thinking—any course of study worthy of being offered at a university should involve critical

thinking. But this GE component provides a ready excuse to encourage students to take a course in Philosophy—something not required by high schools or universities, but undoubtedly a valuable experience for students brave enough to attempt the challenge. Similar views apply to other oddities in the GE curriculum, such as Area E1, Lifelong Understanding and Self-Development.

This is not to say that we do not take seriously a report by Elliott et al. (2006) that many students with four years of college education lack "Prose," "Document," and "Quantitative" literacy. Some results from this report are encouraging. As might be expected, students in 2- and 4-year colleges have "significantly higher" levels of literacy than average U.S. citizens, and students at 4-year colleges outperform students at 2-year colleges. Elliott et al. (2006) also determined that students at public and private universities fared equally, though students at highly selective colleges had slightly higher rates of prose literacy. Nevertheless, many students lack the skills that we might like them to attain. For example, only 34% of students at 4-year institutions could successfully compare the cost of food items on a cost/ounce basis, and only 38% could compare viewpoints in an editorial. These rates compare well to the rates of 18-23% for students at 2-year colleges and 13% for the general population, but appear low compared to committee member expectations.

However, if students are deficient in certain skills, it is not for any gap in the GE curriculum, or a lack of assessment. We constantly assess students—with every quiz, exam, laboratory assignment, homework, and question and answer session in class. More assessment will, if anything, subtract from the scholarly activities that faculty are expected to undertake. We are also concerned that an unhealthy focus on narrow, easy-to-measure outcomes, such as literacy rates, graduation rates, etc., could lead to a decline in the intellectual vitality of the modern U.S. college and university.

Our suggested policy changes, if taken seriously, should boost quantitative literacy by reinforcement without any fundamental overhaul of the GE curriculum. If students lack prose literacy (bearing in mind that we have no idea how CSU, Fresno students compare to their fellow CSU attendees), the university should consider raising standards and expectations in existing courses. For example, in a review of GE syllabi the GE WASC report of 2004 noted that "many" GE courses do not meet the spirit and intent behind an "iterative" writing requirement, and that more than 20% of all syllabi did not ostensibly meet minimum writing requirements.

Presently we can only wonder what revolutionary changes might be effected if one university were brave enough to base tenure and promotion decisions not on whether students like their professors, but instead on whether students report that their professors give challenging and effective writing and/or quantitative assignments and offer timely, detailed feedback that could be used for effective rewriting or recalculation. It is interesting that Elliott et al. (2006) discovered that at 4-year institutions, students in "Math, science, and engineering" exhibit higher level of proficiency in all three areas of literacy (prose, document and quantitative) compared to students in all remaining categories, and that students in the "Fine arts and humanities" performed above the remainder of students, except in the area of quantitative literacy. These latter results may represent student self-selection, but might also reflect the rigor of certain disciplines and the frequency with which students are challenged.

# 4. The Committee View on Standardized Tests

A curious and interesting trend in higher education involves calls for assessment and accountability, with consequent changes in higher education. Ramaley et al. (2005) summarize their premise with the

statement that "Broad, meaningful reform in higher education is long overdue," and that colleges must undergo a "dramatic reorganization of undergraduate education to ensure that all college aspirants receive not just access to college, but an education of lasting value."

To the readers of AACU reports—or anyone else skeptical of whether a college education has "lasting value"—we offer a reminder that: college graduates score higher on standardized tests, earn more money, contribute more time and money to community activities, vote in national elections at a higher rate, and even enjoy better physical and mental health (Institute for Higher Education Policy, 2005; U.S. Census Bureau statistics; Elliott et al., 2006)). That colleges and universities offer lasting value to their graduates cannot be in doubt.

This is not to say that colleges and universities should not seek measures of success. Clearly, some institutions are more successful than others, and we have noted Loren Pope's (2006) collection of 40 colleges that greatly outperform highly selective, high-SAT-demanding universities, such as the Ivy Leagues. The committee embraces Pope's complex, but clearly realistic view of student success.

An irony is that at a time when many universities are rethinking the use of standardized tests (e.g., the SAT) as admission requirements, similar assessment tools are being proposed as students exit a university. The committee rejects standardized tests for several reasons, the most important being the issue articulated by Richard Atkinson (UC President, 1995-2003), who visited a private high school and noted that students

spend hours each month, directly and indirectly, preparing for the SAT...The time involved was not aimed at developing the students' reading and writing abilities but rather their test-taking skills...I have concluded what many others have concluded, that America's overemphasis on the SAT is compromising our educational system.

These observations initiated review by the University of California of standardized tests as admission criteria, some reforms of which were adopted this past summer. This is not to say that tests of any form are rejected. The idea that assessment is currently lacking is, if anything, ludicrous. Faculty test students every day. And if we are curious as to how our students fare after college, numerous exams such as the GRE, LSAT, MCAT, and various licensure exams already exist. But we reject any call for a narrow, test-driven curriculum, which would assuredly rend the intellectual fabric of the university.

Moreover, many students see their college experience as more than a grade on a test—and we share this higher goal, as is clear from our adoption of the E PACE motto. Students should be curiosity-driven, not test-driven, intellectually motivated, not employment oriented, they should seek wisdom, not factoids, they should embrace complexity, not overly simplistic comfortable views of the world they live in. If instead we seek to become a "high school after high school" in order to correct the inadequacies of K-12 education, there truly will be no more "higher" education.

The challenge of the modern university administrator is to resist calls for simplistic strategies and solutions (to problems that might not even exist), and to have the courage to embrace the complexity of the meaning of a university education.

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## Addendum

Meetings of the Q-DOGS committee were convened five times in the fall 2006 semester, and twice again in January and February of 2007 (usually for 1.5-2 hours per session), prior to the issuance of this report. Contributing members of the committee are:

Rita Bocchinfuso-Cohen Honora Chapman Virginia Crisco James Farrar Gregory Kriehn Maxine McDonald Dennis Nef Keith Putirka (Committee Chair) David Schecter Martin Shapiro Martín Valencia Appendix 3 GE enrollment by area from excel

Appendix 4.
<b>Status of Faculty Teaching GE Courses</b>

Т	Table 1. Percent of Sections Taught by FT and PT Faculty   F04-Sp06 by GE Area								
GE Area	GE Area description	FT	РТ						
A1	Foundation - Oral Communication	19%	81%						
A2	Foundation - Written Communication	9%	91%						
A3	Foundation - Critical Thinking	75%	25%						
A3LS	Foundation - Critical Think LS	55%	45%						
B1	Breadth - Physical Sciences	25%	75%						
B1LS	Breadth - Physical Sciences LS	30%	70%						
B2	Breadth - Life Sciences	11%	89%						
B4	Foundation - Quant Reason	62%	38%						
C1	Breadth - Arts	47%	53%						
C2	Breadth - Humanities	58%	42%						
CAP	Capstone - Catalog pre 98-99	78%	22%						
D1	American History	61%	39%						
D2	American Government	42%	58%						
D3	Social Science	64%	36%						
E1	Lifelong Undrstnd & Self Development	42%	58%						
IB	Integration - Physical Universe	67%	33%						
IC	Integration - Arts & Humanities	68%	32%						
ID	Integration - Soc, Econ, Behavioral Sciences	68%	32%						
M/I	Multicultural/International	82%	18%						

	Table 2. Percent of Sections Table	aught by GE	Area and Fa	culty Rank F	all 04-Sprir	1g 06		
GE Area	GE Area Description	Assistant Professor	Associate Professor	Professor	Lecturer	Other	TA/GA	T/TT
A1	Foundation - Oral Communication	5%	3%	10%	60%	0%	23%	17%
A2	Foundation - Written Communication	1%	0%	0%	26%	0%	73%	1%
A3	Foundation - Critical Thinking	6%	23%	24%	45%	0%	1%	54%
A3LS	Foundation - Critical Think LS	18%	0%	36%	45%	0%	0%	55%
B1	Breadth - Physical Sciences	1%	6%	9%	39%	5%	40%	16%
B1LS	Breadth - Physical Sciences LS	0%	0%	17%	57%	0%	26%	17%
B2	Breadth - Life Sciences	2%	0%	8%	14%	14%	62%	11%
B4	Foundation - Quant Reasoning	5%	0%	36%	53%	6%	0%	41%
C1	Breadth - Arts	9%	0%	33%	51%	0%	8%	42%
C2	Breadth - Humanities	13%	5%	16%	60%	1%	4%	34%
CAP	Capstone - Catalog pre 98-99	14%	15%	35%	34%	1%	0%	65%
D1	American History	4%	1%	16%	71%	8%	0%	21%
D2	American Government	17%	0%	6%	74%	4%	0%	23%
D3	Social Science	27%	4%	26%	37%	5%	1%	57%
E1	Lifelong Undrstnd & Self Development	4%	5%	19%	71%	0%	1%	28%
IB	Integration - Physical Universe	18%	15%	22%	45%	1%	0%	54%
IC	Integration - Arts & Humanities	14%	7%	24%	55%	0%	0%	45%
ID	Integration - Soc, Econ, Behavioral Sci	14%	10%	28%	48%	0%	0%	52%
M/I	Multicultural/International	26%	7%	31%	35%	0%	0%	65%

# Appendix 5

# High Risk Courses Table 1. High Risk Courses Number and percent of Low Grades by Course Spring and Fall 2006 Sorted by Percent of Grades Highlighted Courses are GE Courses

GE Area	course	low grades	total	percent
	MATH 76	176	302	58%
B4	MATH 75	272	524	52%
D3	AGEC 1	59	116	51%
	PHYAN 65	186	366	51%
	PHYAN 64	161	337	48%
	ACCT 120A	69	147	47%
	CHEM 1B	54	116	47%
B1	CHEM 1A	82	179	46%
	MATH 100	103	236	44%
B1	PSYCH 10	464	1073	43%
	MICRO 20	85	210	40%
B2	BIOSC 1A	189	483	39%
	MATH 77	104	266	39%
	DS 73	294	759	39%
B2	BIOL 10	397	1033	38%
D3	SOC 1	155	417	37%
E1	NUTR 53	159	430	37%
A3	SOC 3	107	296	36%
ID	SOC 131	99	281	35%
MI	PLSI 120	44	125	35%
	BIOSC 1B	97	280	35%
B1	PHYS 4A	110	318	35%
	MATH 10A	57	166	34%
C1	ARTH 11	48	140	34%
B1	PHYS 2A	176	514	34%
A3	CSCI 1	154	458	34%
	PSYCH 42	52	156	33%
B4	DS 71	189	568	33%
B4	MATH 45	315	961	33%
D3	ECON 40	137	421	33%
	MGT 124	199	620	32%
B2	ZOOL 10	50	159	31%
A3	ANTH 30	67	216	31%
	FIN 120	176	573	31%
D3	HS 91	89	292	30%
D3	GEOG 4	84	277	30%
B1	СНЕМ ЗА	115	383	30%
	BA 18	108	360	30%

Low grades are D, F, NC, W and WU

# Appendix 6. Rubrics

# General Education Scoring Guide for Writing California State University, Fresno

Scoring Level	Knowledge of Conventions	Clarity and Coherence	Rhetorical Choices		
4 - Accomplished	In addition to meeting the requirements for a "3," the writing is essentially error- free in terms of mechanics. Models the style and format appropriate to the assignment.	In addition to meeting the requirements for a "3," writing flows smoothly from one idea to another. The writer has taken pains to assist the reader in following the logic of the ideas expressed.	In addition to meeting the requirements for a "3," the writer's decisions about focus, organization, style/tone, and conten made reading a pleasurable experience. Writing could be used as a model of how to fulfill the assignment.		
3 - Competent	While there may be minor errors, the paper follows normal conventions of spelling and grammar throughout and has been carefully proofread. Appropriate conventions for style and format are used consistently throughout the writing sample. Demonstrates thoroughness and competence in documenting sources; the reader would have little difficulty referring back to cited sources.	Sentences are structured and word are chosen to communicate ideas clearly. Sequencing of ideas within paragraphs and transitions between paragraphs make the writer's points easy to follow.	The writer has made good decisions about focus, organization, style/tone, and content to communicate clearly and effectively. The purpose and focus of the writing are clear to the reader and the organization and content achieve the purpose well. Writing follows all requirements for the assignment.		
2 - Developing	Frequent errors in spelling, grammar (such as subject/verb agreements and tense), sentence structure and/or other writing conventions distract the reader. Writing does not consistently follow appropriate style and/or format. Source documentation is incomplete. It may be unclear which references are direct quotes and which are paraphrased.	Sentence structure and/or word choice sometimes interfere with clarity. Needs to improve sequencing of ideas within paragraphs and transitions between paragraphs to make the writing easy to follow.	The writer's decisions about focus, organization, style/tone, and/or content sometimes interfere with clear, effective communication. The purpose of the writing is not fully achieved. All requirements of the assignment may not be fulfilled.		
1 - Beginning	Writing contains numerous errors in spelling, grammar, and/or sentence structure which interfere with comprehension. Style and/or format are inappropriate for the assignment. Fails to demonstrate thoroughness and competence in documentation.	Sentence structure, word choice, lack of transitions and/or sequencing of ideas make reading and understanding difficult.	The writer's decisions about focus, organization, style/tone, and/or content interfere with communication. The purpose of the writing is not achieved. Requirements of the assignment have not been fulfilled.		

# General Education Scoring Guide for Critical Thinking-1 California State University, Fresno

Scoring Level	Interpretation	Analysis & Evaluation	Presentation
4 - Accomplished	Analyzes insightful questions	Examines conclusions	Argues succinctly
	Refutes bias	Uses reasonable judgment	Discusses issues thoroughly
	Critiques content	Discriminates rationally	Shows intellectual honesty
	Examines inconsistencies	Synthesizes data	Justifies decisions
	Values information	Views information critically	Assimilates information
3 - Competent	Asks insightful questions	Formulates conclusions	Argues clearly
	Detects bias.	Recognizes arguments	Identifies issues
	Categorizes content.	Notices differences	Attributes sources naturally
	Identifies inconsistencies	Evaluates data	Suggests solutions
	Recognizes context	Seeks out information	Incorporates information
2 - Developing	Identifies some questions	Identifies some conclusions	Misconstructs arguments
	Notes some bias	Sees some arguments	Generalizes issues
	Recognizes basic content	Identifies some differences	Cites sources
	States some inconsistencies	Paraphrases data	Presents few options
	Selects sources adequately	Assumes information valid	Overlooks some information
1 - Beginning	Fails to question data	Fails to draw conclusions	Omits argument
	Ignores bias	Sees no arguments	Misrepresents issues
	Misses major content areas	Overlooks differences	Excludes data
	Detects no inconsistencies	Repeats data	Draws faulty conclusions
	Chooses biased sources	Omits research	Shows intellectual dishonesty

# **General Education Scoring Guide for Critical Thinking-2** California State University, Fresno Critical Thinking Scoring Guide

	Interpretation Skills	Analysis, Evaluation Skills	Presentation Skills
4	Relevant/penetrating questions clarify facts, concepts, and relationships. Questions are insightful and go beyond the obvious. Detects sources of bias even subtle or well-disguised. Uses principles of logic to explain fallacies in "if/then" statements. Identifies inconsistencies in language, data, images, or symbols and discusses the possible intent and/or consequences in terms of how the information will be interpreted.	Accurately identifies the main conclusion of an argument; determines if the conclusion is supported with adequate reasons. Develops and uses criteria for making judgments that are reliable, relevant, and intellectually strong. Uses a variety of sources and weighs competing evidence carefully before drawing conclusions or forming judgments. Analysis/evaluation is intellectually careful and precise.	Presents argument clearly and succinctly, capturing the most important points related to the issue. Presents the audience with a thorough and relevant discussion of supporting reasons and evidence for conclusion(s). Exhibits intellectual honesty in recognizing their prejudices or biases and seeks to address them directly. Open-minded; strives to understand other viewpoints.
3	Asks relevant/penetrating questions to clarify facts, concepts, and relationships. Detects sources of bias such as use of leading questions designed to elicit a preferred response or slanted definitions or comparisons. Detects "if, then" statements based on false assumptions. Recognizes contradictions or inconsistencies in language, data, images, or symbols.	While minor errors in analysis may be made, identifies the main conclusion of an argument, determines if the conclusion is supported with reasons, and determines whether an argument makes sense. Evaluates the credibility, accuracy, and reliability of sources; seeks independent sources of evidence, rather than a single sources. Develops and uses relevant, reliable criteria for making judgments.	Presents an argument clearly, conveying important points related to the issue. Presents supporting reasons and evidence for conclusions which address the concerns of the audience. Fairly weighs opposing points of view; is open minded in considering the findings on an inquiry even when they may not support one's own opinions. Makes revisions in arguments/findings when self-examination reveals inadequacies.
2	ions raised about facts, concepts, or relationships are not thoughtful or are unlikely to provide significant information. Detects some sources of bias but neglects other significant elements. May recognize faulty "if/then" statements but form an incorrect conclusion about the source of error. Recognize some contradictions/inconsistencies in language, data, images, or symbols but misses others or fails to recognize inconsistencies within a particular category.	Significant errors are made in identifying the main conclusion of an argument, determining whether the conclusion is warranted, or determining whether the argument makes sense. Limited or inappropriate sources are used in gathering support for a conclusion or the "evidence" provided in the source(s) is misinterpreted. Evaluative criteria are poorly developed, lack relevance and/or are unreliable. Overall, analysis lacks intellectual precision.	Presentation is difficult to follow. While some understanding important points related to the issue is apparent, the argument is not developed logically in the presentation. Opposing points of view are mentioned but examination is "pro forma; arguments/findings which conflict with own interpretation are given little credence even when additional consideration is warranted. Fails to give adequate consideration to divergent points of view.
1	Questions are not used to clarify facts, concepts, or generalizations. Seems oblivious to obvious sources of bias and/or faulty "if/then" statements. Fails to detect contradictions/inconsistencies in language, data, images, or symbols.	Fails to identify the main conclusion of an argument; forms incorrect conclusions about the validity of the argument. Bases conclusions on a single source of evidence. Unclear what, if any, evaluative criteria are used in forming judgments.	Presentation of argument is unclear; fails to convey important points related to the issue. Presents little or no supporting evidence. Own biases/opinions are presented as "truth." Lacks intellectual integrity/rigor.

# Appendix 3 Course Offerings and Enrollment By Semester and GE Area

# Area A1: Oral Communication

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
A1	COMM	3	Fund Public Comm	MAIN	584	590	832	538	789	3333
		6H	Rhtrc Autnmy/Col		0	45	0	48	0	93
		7	Persuasion		144	132	136	119	165	696
		8	Group Discussion		787	642	790	549	772	3540
A1 Total					1515	1409	1758	1254	1726	7662

# Area A2: Written Communication

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
A2	ENGL	1	Intro to Col Writ	MAIN	1456	1136				2592
		5B	Acad Literacy II	]				816	437	1253
		10	Acc Acad Literacy	]			520	281	419	1220
		10H	Acc Acadmc Ltrcy						49	49
A2 Total					1456	1136	520	1097	905	5114

# Area A3: Critical Thinking

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
A3	AAIS	20	Crit Think Race			27	33	27	55	142
	ANTH	30	Crit Think Anth	]	391	216	388	192	239	1426
	CLAS	30	Crit Think Cls				146	86	171	403
	CLS	30	Crit Think Cls		112	66				178
	COMM	5	Argumentation		77	102	110	105	108	502
	CSCI	1	Crit Think+C Sci		459	111	347	133	305	1355
	GME	5	Crit Reasoning	MAIN	92	11	55	13	63	234
	NSCI	4	Science+Nonsense		162	154	211	138	264	929
		4H	Science+Nonsense		45		44			89
	PHIL	25	Mthds of Reason	]	151	119	172	141	151	734
		45	Intro to Logic	]	60	51	81	55	52	299
	SOC	3	Crit Think Socty	]	200	129	200	127	165	821
	WS	12	Crit Th Gend Iss		237	204	259	223	247	1170
A3 Total	A3 Total					1190	2046	1240	1820	8282

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
A3LS	PHIL	28	Crit Thnk Clasrm	MAIN	63	45		8		116
A3LS Total					63	45		8		116

# Area B1: Physical Sciences

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
B1	CHEM	1A	General Chem 1A	MAIN	247	200	273	219	196	1135
		ЗA	Intro Gen Chem	]	397	309	406	292	392	1796
		10	Chemistry & Soci	]	86		64		70	220
		10H	Chemistry & Soci					24		24
		1A	General Chem 1A	UNITRACK	103		93		78	274
	ENSC	1	Environment Sci	MAIN			44	68	62	174
		1	Environment Sci	UNITRACK			58		60	118
	GEOL	1	Nat Dis Earthres	MAIN	382	454	399	502	443	2180
		8H	Nat Dis Earthres			34				34
PHYS	PHYS	2A	General Physics	MAIN	472	246	535	285	542	2080
	4A	Mech+Wave Motion		141	154	132	140	125	692	
		4AL	Lab Mech+Wave Mo				94	77	99	270
		10	Conceptual Phys		153	147	136	136	115	687
		2A	General Physics	UNITRACK	18		28			46
		4A	Mech+Wave Motion		15		33		26	74
	PSCI	21	Elem Astronomy	MAIN	394	192	366	187	388	1527
B1 Total					2408	1736	2661	1930	2596	11331
CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
B1LS	NSCI	1A	Intsci Phys Chem	MAIN	227	146	156	133	166	828
B1LS Total					227	146	156	133	166	828

# Area B2: Life Sciences

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
B2	BIOL	10	Life Science	MAIN	934	1127	1184	1196	1241	5682
		10	Life Science	UNITRACK	88		58		64	210
	BIOSC	1A	Intro Biology	MAIN	195	180	242	169	235	1021
		1A	Intro Biology	UNITRACK	162		135		198	495
	BOT	10	Plant Biology	MAIN	132	74	146	66	148	566
	ZOOL	10	Animal Biology	MAIN	95	74	79	69	92	409
		10	Animal Biology	UNITRACK		85		54		139
B2 Total					1606	1540	1844	1554	1978	8522

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
B2LS	NSCI	1B	Intro Earth&Life	MAIN	157	105	88	54	77	481
B2LS Total					157	105	88	54	77	481

## Area B4: Quantitative Reasoning

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
B4	DS	71	Quant Analysis	MAIN	603	582	599	569	577	2930
	MATH	75	Math Analysis I	DIGITAL		26				26
		10A	Concepts Math I	MAIN			166	100	143	409
		45	What Is Math		979	845	961	811	977	4573
		75	Math Analysis I		362	198	285	84	117	1046
		75	Math Analysis I	UNITRACK	51		16			67
B4 Total					1995	1651	2027	1564	1814	9051

# Area C1: Arts

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
C1	ARMS	20	Arts of Armenia	DIGITAL		35		44		79
		20	Arts of Armenia	MAIN	39		40			79
	ART	1	Art Forms	MAIN	159	100	160	103	132	654
		20	Drawing		148	140	150	146	142	726
		40	Painting		47	49	48	47	47	238
		50	Beg Sculpture		100	95	119	109	92	515
	ARTH	10	Ancient Prim Wld	MAIN	131	130	124	123	130	638
		11	Early Mdrn World						148	148
			The Modern World		137	125	140	123		525
	CLAS	9	Cls Artistic Exp	MAIN			212	136	177	525
	CLS	9	Cls Artistic Exp	MAIN	266	155				421
	DRAMA	22	Oral Interp Lit	MAIN	24	45	24	41	23	157
		22Z	Oral Lit: London					1		1
		62	Theatre Today		712	709	829	759	781	3790
		75H	Theatre Cont Amr		12		15			27
	ENGL	41	Poetry Writing	MAIN	47	69	71	67	74	328
		43	Fiction Writing		41	69	68	64	72	314
	MUSIC	74	Listener's Guide	DIGITAL			35			35
		9	Intro to Music	MAIN	243	289	262	269	278	1341
		60H	Mu Social Contex		24		27		24	75
		74	Listener's Guide		234	224	307	232	395	1392
C1 Total					2364	2234	2631	2264	2515	12008

# Area C2: Humanities

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
C2	ARM	1B	Elem Armenian	MAIN		16		22		38
		2A	Inter Armenian			1	15			16
	CDDS	92	Am Sign Lang II	MAIN			70	86	76	232
	CHIN	1A	Elem Chinese	MAIN	50	45	44	31	27	197
		1B	Elem Chinese		16	14	9	8	6	53
	CSD	92	Am Sign Lang II	MAIN	79	70				149
	ENGL	20	Intro to Lit	MAIN	93	92	96	85	89	455
		30	Masterpieces		15		17	11	11	54
		42H	Creative Writing						8	8
	FREN	1B	Elem French	MAIN	12	29	18	36	26	121
		2A	Fren for Commun		18	11	24	14	19	86
		2B	Fren for Commun		10	12	9	16	14	61
	GERM	1B	Elem German	MAIN		20		16	6	42
		2A	Inter German		6		8	1	11	26
		2B	Inter German			7		6		13
		2A	Inter German	UNITRACK	9		6		11	26
	GRK	1A	Elem Greek	MAIN	22		15		11	48
		1B	Elem Greek			12		7		19
	HMONG	1B	Hmong	MAIN		34		36		70
	HUM	11	Hum Baroque/Mdrn	DIGITAL				23		23
		10	Hum Antqty/Ren	MAIN	280	248	234	175	241	1178
		10H	Intro Hum I-Hon		47		48		49	144
		11	Hum Baroque/Mdrn		77	95	105	82	67	426
		15	Myth & Wld Hum		46	64	55	72	48	285
		10	Hum Antqty/Ren	UNITRACK				10		10
	ITAL	1A	Elem Italian	MAIN			64	45	56	165
		1B	Elem Italian		19	41	21	31	20	132
		2A	Inter Italian		7		8		13	28
		2B	Inter Italian			7		7		14
	JAPN	1A	Elem Japan A	MAIN	99	102	101	95	129	526
		1B	Elem Japan B		26	39	21	25	30	141
	LATIN	1A	Elem Latin	MAIN	49				56	
		1B	Elem Latin			15		12		27
		1A	Elem Latin	OFFCAMPU	13					13
		1A	Elem Latin	PUBSCHOO	LS				11	11
	LING	10	Intro to Lang	DIGITAL	29					29

I

		10	Intro to Lang	MAIN	198	183	213	134	188	916
Р	PHIL	1	Intro to Phil	MAIN	238	203	242	190	228	1101
		2	Expl Relig Mean		102	131	93	49	101	476
		10	Self Rel Soc		32	33	57	37	58	217
		20	Moral Questions		208	244	302	244	320	1318
Р	PORT	1A	Elem Portuguese	MAIN	16		26	1	24	67
		1B	Elem Portuguese			10		16		26
S	SPAN	1B	Elem Spanish	MAIN	92	108	106	135	113	554
		2A	Span for Commun		106	85	109	80	72	452
		2B	Span for Commun		46	43	35	38	16	178
		3	Reading + Writng		21	24	22	16	33	116
		4A	Sp Biling Studt		30	29	31	23	28	141
		4B	Sp Biling Studt		27	23	30	26	22	128
		2A	Span for Commun	UNITRACK	4		6			10
		2B	Span for Commun			0		0		0
C2 Total					2142	2119	2339	1965	2238	10803

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
C2LS	LING	11	Intro to Lang	MAIN	127	103	116	83	102	531
C2LS Total					127	103	116	83	102	531

## Area D1: American History

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
D1	HIST	11	Am Hst to 1877	MAIN	655	721	591	463	760	3190
		12	Am Hst Fr 1877		744	786	869	647	976	4022
		15H	Trials of Centur		17		23		18	58
		11	Am Hst to 1877	UNITRACK	217		227		238	682
		12	Am Hst Fr 1877			169	26	175	23	393
D1 Total					1633	1676	1736	1285	2015	8345

# Area D2: American Government

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
D2	PLSI	2	Amer Govt Instit	DIGITAL				85	81	166
		2	Amer Govt Instit	MAIN	1369	1331	1298	1072	1116	6186
		2H	Amer Govt Hon			50		36		86
		2	Amer Govt Instit	UNITRACK	49		68		54	171

D2 Total	1418	1381	1366	1193	1251	6609

# Area D3: Social Sciences

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
D3	AAIS	1	Eth Experience	MAIN	36					36
		10	Intro Africana		30		40		40	110
		15	Slavery & Am Exp						37	37
		27	Africana Culture					28		28
		50	Cont Life Am Ind				16		13	29
	AGEC	1	Intro Agric Econ	MAIN	128	115	116	101	102	562
	ANTH	2	Introd Cult Anth	MAIN	74	86	62	79	77	378
		3	Intro Prehist&Pa			27	24	35	25	111
	ARMS	10	Intr Arm Studies	MAIN	24	11		14	15	64
	ASAM	15	Intro Asian Amer	MAIN	40	34	40	41	40	195
	CDDS	98	Intr Hd Hear Deaf	DIGITAL			38	34	39	111
	CFS	31	Fam in America	MAIN		32		30		62
	CLAS	3	Intro to Cls	MAIN			74	31	85	190
		5	Chicano Culture				81	40	73	194
	CLS	3	Intro to CIs	MAIN	90					90
	CRIM CSD	5	Chicano Culture		42	45				87
		10	Crime Crim & Jus	MAIN	123	117	126	107	109	582
		10	Crime Crim & Jus	UNITRACK		23		31		54
		98	Intr Hd Hear Deaf	DIGITAL	38	35				73
	ECON	40	Prin Microecon	DIGITAL				51		51
		25	Intro to Econ	MAIN	70	68	60	61	78	337
		40	Prin Microecon		435	421	463	419	477	2215
		50	Prin Macroecon		386	394	401	367	383	1931
		25	Intro to Econ	UNITRACK	36		44		41	121
		40	Prin Microecon		46		44		23	113
		50	Prin Macroecon			21		28		49
	GEOG	4	World Geography	MAIN	320	277	253	235	255	1340
	HIST	20	World History I	MAIN	187	199	202	179	165	932
		21	World History II					14	24	38
	IT	20	Tech + Society	DIGITAL	48	46	35	43	26	198
	MCJ	1	Mass Comm+Soc	MAIN	172	127	162	130	160	751
	PLSI	1	Mod Politics	MAIN	78	38	68	33	84	301
	PSYCH	10	Intro to Psych	DIGITAL		37	39			76
		10	Intro to Psych	MAIN	540	512	485	510	605	2652

		62H	Soc/Cultural Psy			14		23		37
		10	Intro to Psych	UNITRACK	31					31
	SOC	1	Prin of Socio	DIGITAL	38	28	30	53	30	179
		1	Prin of Socio	MAIN	198	174	185	149	196	902
		1S	Prin of Socio					19		19
		2	Social Problems		79	57	57		79	272
		2S	Social Problems					6		6
	WS	10	Intro to W S	MAIN	120	96	114	112	121	563
D3 Total					3409	3034	3259	3003	3402	16107

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
Ξ1	ART	13	Design	MAIN	126	104	123	109	130	592
	ASCI	67	Anim & Society	MAIN	116	58	141		134	449
	CFS	38	Lifespan Develop	MAIN	500	357	498	319	457	2131
		38H	Honors Lifespan			13		17		30
		39	Intro Ca Develop				67	113	71	251
	DANCE	16	Intro to Dance	MAIN	24	27	28	29	28	
		70	Balance Body Mnd		26		18		28	
	DRAMA	32	Intro to Acting	MAIN	26	26	46	45	44	187
		32Z	Intro to Acting					5		5
	FIN	30	Pers Fin Plan	DIGITAL	39		39		40	118
		30	Pers Fin Plan	MAIN	78	122	77	118	77	472
	GERON	10S	Meaningful Life	DIGITAL					5	
		10S	Meaningful Life	MAIN	21	15	16	24	12	
		18	Women + Aging		11					11
		111	Heritage + Aging						24	24
	HS	90	Contmp Hth Issue	DIGITAL	50	99	135	145	144	573
		91	Intro Human Sex		49	47	42	47	50	235
		90	Contmp Hth Issue	MAIN	216	164	165	160	167	872
		91	Intro Human Sex		271	235	250	215	244	1215
		110	Drugs Soc Health		106	105	92	90	105	498
	KINES	32	Lifetime Fitness	MAIN	53	65	93	81	118	410
	LING	30	Language Lifespa	DIGITAL	26	22	25		21	94
		30	Language Lifespa	MAIN				20		20
	NUTR	53	Nutr + Health	MAIN	564	430	569	439	665	2667
		53H	Nutr & Health			21		23		44
	PSYCH	61	Personal Adjust	MAIN	158	87	214	132	218	809
	RLS	10S	Meaningful Life	DIGITAL					14	14
		10S	Meaningful Life	MAIN		8		30		38
		80	Life Long in Nat	7	200	159	205	149	205	
	WS	18	Women + Aging	MAIN	15				37	52
1 Total	•	•		•	2675	2164	2843	2310	3038	13030

# Area E1: Lifelong Understanding and Self-Development

# Area IB: Physical Universe and Its life forms

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
3	ANTH	161	Bio-Bhav Evl Hum	DIGITAL			104	200	192	496
		161	Bio-Bhav Evl Hum	LEMOORE	3	5				8
		161	Bio-Bhav Evl Hum	MAIN	388	346	276	200	216	1426
		161	Bio-Bhav Evl Hum	VISALIA	11	3				14
	CHEM	170	Chem Marketplace	MAIN	34	43	36	41	44	198
	GEOG	115	Violent Weather	MAIN	243	254	351	329	436	1613
		128	Envirn Pollution			47	39	135	133	354
		115	Violent Weather	OFFCAMPU	S			17		17
	GEOL	112	Planet Erth-Time	DIGITAL	143	246	200	246	235	1070
		112	Planet Erth-Time	MAIN	76	40	82	47	61	306
		167	Oceans Atmos Clim		50	82	93	83	97	405
		168	Calif Earth Sys		125	130	136	128	118	637
	HS	161	Environ/Hmn Hlth	DIGITAL	150	261	347	473	484	1715
		161	Environ/Hmn Hlth	MAIN	156	159	146	155	175	791
	NSCI	115	Envir Earth Life	DIGITAL					62	62
		115	Envir Earth Life	LEMOORE	13	2	3			18
		115	Envir Earth Life	MAIN	370	459	465	355	292	1941
		125	Killer Microbes						33	33
		115	Envir Earth Life	VISALIA	15	17	12	15		59
	PHYS	100	Cncpt Quntm Phys	MAIN	49	106	92	105	56	408
	PLANT	105	Food Soc + Envir	MAIN	322	246	283	229	218	1298
	PSCI	131	Classical Phys	MAIN	49		32	21	7	109
		168	Energy Environ			43		45		88
	PSYCH	126	Cognit Neurosci	MAIN					19	19
B Total					2197	2489	2697	2824	2878	13085

# Area IC: Arts and Humanities

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
IC	AAIS	129	Af Am Lit Clascs	MAIN			45	40	42	127
	AETH	100	Cont Conf Morals	MAIN	35	4	30	9	34	112
	ARM	148	Mstrpcs Arm Cult	MAIN		27		15		42
	ART	102	Idea Visual Cult	MAIN		35		32		67
	DANCE	171	Phil Bas Tnd Dnc	MAIN	31	26	23	25	22	127
	DRAMA	163	Dramatic Lit	MAIN	75	65	74	78	27	319
		188TZ	British Theatre			22		20		42
	ENGL	102	Mstrpcs Engl Lit	LEMOORE			3			3
		103	Mstrpcs Am Lit		3	1		5		9
		101	Mstrpcs Wrld Lit	MAIN	77	44	58	45	48	272
		102	Mstrpcs Engl Lit		41	20	33	44	39	177
		102Z	Mstrpcs Engl Lit			9				9
		103	Mstrpcs Am Lit		313	303	306	237	207	1366
		112	Wrld Lit Ancient		39	19	19	29	25	131
		113	Wld Lit Mdvl Ren		24	14	19	15		72
		114	Wrld Lit Modern			10	24		30	64
		174	Popular Fiction		25		24		25	74
		102	Mstrpcs Engl Lit	VISALIA	12		9		11	32
		103	Mstrpcs Am Lit		9	10		14		33
	FREN	109	Fren Lit & Cult	MAIN	10		7		11	28
		149	Voices of Africa		21	28	29	22	30	130
	HUM	104	Hum Mdl Age Ren	MAIN	42	38	39	29	31	179
		108	Hum Clscl Athens		38	65	32	76	30	241
		110	Hum Rep Rome		42	40	42	34	37	195
		118	Flklor Cont Life		51	48		50	40	189
	LING	115	Lang Culture Soc	DIGITAL	60	61	57	59	55	292
		130	Lang + Gender		86	95	115	124	111	531
		115	Lang Culture Soc	MAIN	87	80	137	118	142	564
		130	Lang + Gender		116	94	99	113	114	536
	MUSIC	170A	Mus Latin Amer	MAIN	85	78	70	66	68	367
		171	Int Worlds Music		73	89	71	78	71	382
		187	Pop Mus Jz Rock		484	539	468		416	
	PHIL	120	Cont Conf Morals	MAIN	286	214	379	268	344	1491
		150	Founds Knowledge		24	55	55	64	60	258
		151	Cogntve Sci Mind		30		35	66	27	158
		120	Cont Conf Morals	OFFCAMPU					15	

	SPAN	125	Hispanic Culture	MAIN	97	176	177	195	208	853
		129	Mexican Culture		22		23	20	19	84
IC Total					2353	2309	2502	2634	2339	12137

Area ID: Social, Political and Economic Institutions and Behaviour, Historical Background

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
D	AAIS	103	Indians of Calif	MAIN		26				26
		144	Race Relations	]		37		40		77
	AGEC	155	Environ Resource	MAIN				32	39	71
	ANTH	116W	Anthro Religion	DIGITAL	58					58
		116W	Anthro Religion	MAIN	176	250	172	168	210	976
	CLAS	114	Mex/SW 1810-1910	MAIN			119	73	127	319
	CLS	114	Mex/SW 1810-1910	MAIN	90	42				132
	CRIM	120	Juvenile Delinq	DIGITAL		40		40		80
		153	Psych of Crime	LEMOORE				10		10
		101	Crm & Viol in Am	MAIN	96	92	81	89	85	443
		120	Juvenile Delinq	]	375	374	414	393	367	1923
		153	Psych of Crime		458	436	453	450	402	2199
		153	Psych of Crime	OFFCAMPU	IS		20			20
		153	Psych of Crime	VISALIA				16		16
E	ECON	176	Econ Theme Film	DIGITAL			80		98	178
		146	Econ of Crime	MAIN	35	26		25	37	123
		167	Soc Econ Chalngs	]		31				31
		176	Econ Theme Film		52		58		38	148
		183	Pol Econ Mideast			21				21
		146	Econ of Crime	OFFCAMPU	IS		21			21
	GEOG	169	American West	MAIN		92	82	18		192
	GERON	100	Images/Aging	DIGITAL	50	81	87	90	98	406
		100	Images/Aging	MAIN	131	74	90	88	89	472
	HIST	101	Women in History	MAIN	82	67	92	91	111	443
		149TZ	Religion/Music					9		9
	HONOR	102	Rev Nat Soc Sci	MAIN	29	28	29	26	22	134
	KINES	111	Olympic Games	MAIN	271	247	265	261	272	1316
	MCJ	178	New Info Tech	MAIN	97	47	98	96	95	433
	PLSI	149TZ	Grt Issue Brit Hx	MAIN		13		12		25
	PSCI	21	Elem Astronomy	MAIN	85		85			170
	PSYCH	123	Dev Psychobiolgy	MAIN			20			20
		173	Envirnmental Psy			30				30
	SOC	131	Soc Sex & Gender	DIGITAL					53	53
		131	Soc Sex & Gender	MAIN	291	272	281	255	170	1269
		143	Deviance Contr	7		78		19		97
		163	Urban Socio	1	41	66		52	45	204

	SSCI	110	Calif Studies	LEMOORE	2	12	14	4	3	35
		110	Calif Studies	MAIN	334	197	267	285	349	1432
		110	Calif Studies	VISALIA	17	19	18	21	25	100
	WS	101	Women in History	MAIN	54	56	74	65	75	324
ID Total					2824	2754	2920	2728	2810	14036

# Area M/I: Multicultural/International

CrsAtr Val	Subject	Catalog	Descr	Location	FI 2005	Sp 2006	FI 2007	Sp 2007	FI 2007	Grand Total
M/I	AAIS	150	South Africa	MAIN		34		37		71
		164	Afr Cult Perspec				20		19	39
	ANTH	105W	Applied Anthro	DIGITAL		32	59	30	49	170
		105W	Applied Anthro	MAIN	87	109	61	82	84	423
		120	Eth Rel + Cult		31	28	28	32	25	144
		123	Peo Cult SE Asia		27	23	36		44	
		125	Trd Chg Chin Jpn			32		37	40	109
		105W	Applied Anthro	OFFCAMPU	S		23			23
	ASAM	110	As-Am Community	MAIN	142	92	128	104	102	568
	BA	104	Global Business	MAIN	80	74	81	80	76	391
	CDDS	139	Deaf Culture	DIGITAL			72	81	125	278
		139	Deaf Culture	MAIN			72	78	72	222
	CLAS	160	Sex Race Class	MAIN			43	88	45	176
		170	Latin Amer St				80	81	84	
	CLS	160	Sex Race Class	MAIN	38	83				121
		170	Latin Amer St		84	82				166
	COMM	164	Intercult Comm	DIGITAL					46	
		164	Intercult Comm	MAIN	78	80	52	36		246
	CSD	139	Deaf Culture	DIGITAL	37	38				75
		139	Deaf Culture	MAIN	115	117				232
	DANCE	174TZ	Universal Trends	MAIN				11		11
	ECON	181	Pol Econ Lat Am	MAIN		24		36		60
	GEOG	167	People/Places	MAIN	222	234	181	248	185	1070
	GERON	161	Mult Cult/Aging	DIGITAL			49	45	96	
		161	Mult Cult/Aging	MAIN	67	79	67		72	371
	HONOR	101	Emerging Voices	MAIN		20		27		47
	HS	104	Global Cult HIth	DIGITAL	48	50	44		44	186
		128	Hol HIth Alt Med	MAIN			29			29
	LING	147	Bilingualism	DIGITAL	52		57	29	53	191
		147	Bilingualism	MAIN	59	91	57		44	
	MCJ	175	Media Stereotyps	MAIN	91	134	97	80	99	501
		176	Intnl Mass Comm		33	79	85	80	70	347
	PHIL	131	Compara Religion	MAIN	35					
		132	Religion Margin		57	47	50	56	106	316
	PLSI	120	Intl Politics	ANTELOPE					8	8
		120	Intl Politics	MAIN	147	127	131	126	169	700

	120Z	Intl Politics	7		10				10
SOC	111	Soc Race & Ethn	MAIN	134	136	95	138	99	602
	142	Soc Pop Culture		84	78			50	212
SSCI	180	Diversity in U S	LEMOORE	16		8		14	38
	180	Diversity in U S	MAIN	509	355	475	302	338	1979
	180	Diversity in U S	VISALIA	13	24	16	22	15	90
SWRK	136	Cult Divrs+Opprsn	MAIN	106	137	160	125	154	682
WS	110	Represent Women	MAIN	64	110	84	63	111	432
	120	Women of Color			55	38	63	22	178
	135	Wom Other Cultur		113	111	73	116	97	510
Total				2569	2761	2577	2537	2681	13125