# COMPONENTS OF A MODEL COURSE OUTLINE OF RECORD Academic Senate for California Community Colleges <br> Adopted November 1995 

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#### Abstract

The course outline of record plays a central role in the curriculum of the California Community Colleges. Standards for the course outline appear in Title 5, in the Curriculum Standards Handbook, in accreditation standards, in intersegmental general education agreements with the California State University and the University of California (IGETC and CSU-GE), and serve as the basis for transfer articulation agreements with individual CSU and UC campuses. All of these standards have been revised recently (Title 5 in 1993, the Handbook in 1995, IGETC in 1991 and CSU-GE in 1992) or are currently being revised (accreditation). As a consequence, discipline faculty and curriculum committee members are faced with the daunting task of writing and approving course outlines which will meet this array of updated standards.

This paper reviews the role of the course outline and summarizes the requirements and standards for writing approvable outlines of record. (Appendices give the complete versions of each of the published standards.) Moreover, the paper covers each of the required components of the outline and presents an approach to integrating the standards throughout the outline. This approach is summarized in the form of a model course outline of record for credit courses. The purpose of this model course outline is not to force standardization of curriculum but rather to assist faculty in presenting their courses in a format which will accurately reflect the quality instruction they are providing. This format is intended to clearly demonstrate that the course will stand up to the scrutiny of the state and four-year institutions.


## COMPONENTS OF A MODEL COURSE OUTLINE OF RECORD

## Academic Senate for California Community Colleges

The course outline has evolved considerably from the list of topics covered which an instructor would share with students in the class. It is now a document with defined legal standing which is read by many more eyes than just those of instructor and student. Even so, no model has been written by which instructors might have reasonable assurance that the required components--both within their college and without--are met. To address this need the Academic Senate for California Community Colleges passed the following resolution at its Fall 1994 Plenary Session.


#### Abstract

Model Course Outline of Record Whereas the Chancellor's Office of the California Community Colleges has issued the 1994 Curriculum Standards Handbook which delegates several approval authorities to local colleges and significantly revises the criteria for course and program approval, and Whereas the California State University, in Executive Order 595, removed the ability of community colleges to self-certify general education courses and has begun a systematic review of all such courses using stringent criteria, and Whereas many local colleges have experienced difficulties with articulation of courses campus-to-campus, to the Intersegmental General Education Transfer Curriculum (IGETC), and to the California State University (CSU) for general education requirements, Therefore be it resolved that the Academic Senate for California Community Colleges direct the Executive Committee to prepare a position paper recommending to local academic senates and curriculum committees a model course outline of record format and content that substantively addresses the approval criteria for CSU general education courses, for IGETC courses, and for the 1994 Curriculum Standards Handbook.


The purpose of this paper is to develop such a model course outline of record.

## OUTLINE

Introduction ..... 1
Role of the Course Outline ..... 2
Title 5 Requirements ..... 3
Curriculum Standards Handbook Requirements ..... 4
CSU/GE and IGETC Requirements ..... 5
Accreditation Requirements ..... 6
Course Outline of Record Format for Credit Courses ..... 8
Process of Course Outline Revisions ..... 11
Appendices
Title 5 Regulations ..... 13
Curriculum Standards Handbook Sections ..... 17
CSU/GE Standards. ..... 21
IGETC Standards ..... 33
Accreditation Standards ..... 45
Curriculum Resource Contact Persons ..... 50
Examples of Course Outlines ..... 51

## ROLE OF THE COURSE OUTLINE

The course outline of record plays a critical educational role on campus. It is the primary vehicle for course planning. When a course is revised or updated, it is the course outline that records the changes. As such, it forms the basis for a contract among the student, instructor, and institution identifying the expectations which will serve as the basis of the student's grade and giving the fundamental required components of the course which the student is guaranteed to receive from the instructor and institution. More than just specifying the required components of the course, the outline of record states the content and level of rigor for which students--across all sections of the course--will be held accountable. Courses are designed to provide a coherent body of knowledge to prepare students in a particular subject. The prerequisites students need to advance successfully through a series of such courses are based on information in the outline of record.

Maintaining academic standards means providing consistent, quality instruction in the classroom. As our courses are taught by various instructors, both full- and part-time, it is by reviewing the course outline that they may clearly identify the standards and content of the course they are to teach. In addition, the course outline plays a critical role in the on-going process of program review by which a college seeks to keep its curriculum relevant and to allocate its resources sufficiently to maintain its programs. When new programs are designed, it is through the selection of courses and construction of new course outlines that the program design is evaluated for its ability to meet the newly-identified needs of students.

The course outline of record should not be confused with the syllabus. While a course outline is a contract between the college and the student containing the requirements and components of the course, a syllabus describes how the individual instructor will carry out the terms of that contract through specific assignments. Syllabi give specific dates, grading standards, and other rules of the conduct of a course required by the individual instructor. A course outline gives the basic components of the course required to be taught by all instructors. A syllabus allows the individual instructor to include methods and topics which may go beyond the course outline. It gives the instructor the opportunity to bring out his or her particular talents and strengths.

Another role of the course outline is to demonstrate that all of the required components are present in the course to the required degree of rigor as specified in Title 5 and the Curriculum Standards Handbook. It is the responsibility of the college curriculum committee to review course outlines submitted by discipline faculty to assure that they meet these standards. Such course approval is the central task of the curriculum committee. When initially offered as part of a program, the course outline is submitted to both the California Postsecondary Education Commission (CPEC) and the Chancellor's Office in the program approval process. When questions arise as to the appropriateness of a college's course or program offerings, the Chancellor's Office or CPEC may request copies of the pertinent course outlines for review. If these reviews and approvals are not satisfactory, the colleges may not offer the programs and/or courses. In addition, the Chancellor's Office may also use the quality of the course outline of record to determine that colleges are meeting the conditions for delegation of curriculum approval authority. (See section 2.4 of the Curriculum Standards Handbook excerpted in the appendix.)

Title 5 regulations in the area of matriculation allow the establishment and enforcement of
prerequisites, but only when students would be highly unlikely to succeed without them. In some cases those prerequisite skills must be documented in the course outline of record. The process that the college uses is included in its annual Matriculation Plan and is part of the documentation provided for site visits by the Chancellor's Office.

Outlines of record are also submitted annually for approval as meeting California State University General Education (CSU/GE) breadth requirements and for inclusion in the Intersegmental General Education Transfer Curriculum (IGETC). Each college also establishes Transfer Articulation Agreements with surrounding four-year colleges and universities. Again, the course outline serves as the basis for evaluation of the transferability of these courses and to substantiate their equivalence to those courses offered at the four-year schools.

Each college maintains its accreditation through reviews conducted by the Western Association of Schools and Colleges (WASC). In the self-study done in preparation for such reviews--and during the site visits which accompany them--course outlines of record serve as documentation of the college's high academic standards and quality certificate and degree programs. In the current move toward increased accountability many other outside agencies have begun to look at the course outline of record--its quality and rigor--as a means of evaluating institutional effectiveness. For example, course outlines are cited by the California Postsecondary Education Commission (CPEC), in its effort to reduce fraud and abuse in the use of federal financial aid as the State Postsecondary Review Entity (SPRE). CPEC's SPRE standard 1, Information for Students, requires that "to document the accuracy of these materials, the institution should have available current course syllabi/outlines...."

## TITLE 5 REQUIREMENTS

The major section in Title 5 which addresses the requirements for the course outline is 55002 , Standards and Criteria for Courses and Classes. Subsection (a) on associate degree credit courses is found in the appendix. The course outline also plays an important role in establishing prerequisites (particularly section 55201), course and program approvals (section 55000.5) and in distance learning (particularly sections 55352, 55376, and 55378). These sections also appear in the appendix.

Title 5 places some specific requirements on the course outline of record. The course must have a grading policy that is clearly based on course objectives in the course outline. The grade must be based on demonstrated proficiency at least part of which is either in the form of written essays or, if the curriculum committee deems it more appropriate, problem solving ability may be added to or substituted for essay writing.

The number of units must appear in the course outline. Each unit must be shown to require three hours of work per week by the student either in or out of class. The division of credit among lecture, laboratory, and activity must be shown. (Typically, one lecture hour is deemed to require at least two hours of work outside of class and so equals one unit. Three hours of laboratory or activity is commonly equated to one unit of credit. This is based on the definition of the credit hour in Title 5 section 55002.5, commonly called the Carnegie unit.) In all courses, even those which are predominately laboratory or activity courses, the course outline must demonstrate that students are required to study outside of class.

Prerequisites, corequisites, and advisories on recommended preparation are based on a review of the course outline and other course materials. In the case of sequential courses within and across disciplines (such as Chemistry 1A for Chemistry 1B or Anatomy 1 for Nursing 1), a list of prerequisite skills which serve as the basis for content review is to be included in the course outline if the district's policy is to be in accord with the Model District Policy. (The appropriate section of the Policy also appears in the appendix.) Indeed, it is one of the responsibilities of the curriculum committee to ascertain if prerequisites skills are needed for a course, especially skills in the areas of English and mathematics.

A credit course is required to incorporate critical thinking along with learning skills and a vocabulary that is definitely at the college level. It is through the course outline that these skills are demonstrated to be at college level and an integral component of the course.

In the Title 5 subparagraph which addresses the course outline of record specifically, the required components are unit value, scope, objectives, and content. The outline must also specify assignments, instructional methodology, and methods of evaluation, although in these sections only types and examples are required. This is an important distinction. Objectives and content in the course outline are required of all instructors. Individual instructors are, however, free to use different assignments and methodology as long as the types they use are equivalent (in covering course content and achieving student outcomes) to those illustrated in the course outline. This section also requires types of reading assignments, that is, texts and other instructional materials. Again, not all instructors must use the same text, but a complete list of the types used should be included in the course outline. This is difficult to achieve given that instructors change texts and other reading assignments regularly. Many colleges meet this requirement by maintaining a complete list of required material in the bookstore and/or library and then make reference to this list in the course outline. (When they are to be reviewed by those outside the college, the course outlines must, of course have such reading assignments appended.)

The course outline is also an important part of the regulations and guidelines on distance education. Course quality in distance education courses is to be judged by the same standards as spelled out in Section 55002 above. As such, distance learning is a mode of presentation to be described (types and examples) in the sections on assignments, instructional methodology, and methods of evaluation. It is noteworthy that the outline must indicate the instructor contact as specified in Section 55376. As indicated in Section 55352, the course outline may also reflect a review of the effect of the number of students on academic standards. These components are required to be part of the course outline in part because Section 55378 requires separate approval by the curriculum committee of courses and sections taught in distance learning mode.

## CURRICULUM STANDARDS HANDBOOK REQUIREMENTS

Currently, under delegation of curriculum approval authority, colleges submit only new programs to the Chancellor's Office for approval. However, to maintain the delegation of approval authority, colleges must certify that their local approval standards are equal to or exceed those specified in the Curriculum Standards Handbook. Those standards consist of five criteria: mission, need, quality, feasibility and compliance, as explained below.

The objectives of the course must be consistent with the mission of California Community Colleges and with the local college mission as expressed in its master plan. In addition, there must be a definite need for the course. In most cases, associate degree credit courses serve as required preparation for a degree, certificate or transfer. In many cases, such courses also meet general education requirements for the associate degree and/or transfer major. The course objectives must be clearly designed to meet that stated need.

The outline of record must reflect a quality in the course sufficient to obtain the objectives. To do this the outline must be complete, that is, contain all the elements specified in 55002(a)(3): unit value, scope, objectives, and content. The outline must also include types and examples of assignments, instructional methodology, and methods of evaluation. It must be rigorous and effective in integrating throughout the outline the required components of critical thinking, essay writing/problem solving, and college level skills and vocabulary. An integrated approach is one in which each element appears throughout the objectives, is covered in the course content, is reflected in comprehensive assignments, is taught using an effective methodology, and serves as an essential part of the evaluation of student performance. Citations of texts and other reading material must be current, that is, reflect the present knowledge of skills and principles upon which the course is founded.

The college must commit the resources, both in terms of staff and facilities, to assure the feasibility of offering the course with sufficient frequency to maintain course objectives--at least every two years. Lastly, the course must comply with any other applicable laws such as those related to classes for those with disabilities.

## CSU/GE AND IGETC REQUIREMENTS

The California State University General Education-Breadth requirements are detailed in Executive Order 595 which appears in the appendix. The Intersegmental General Education Transfer Curriculum is presented in the appendix. Both of these sets of general education standards focus on the particular subject matter and appropriate approaches which a course must have to qualify as fulfilling the requirements of a given area in that system. Individual courses are submitted by community colleges and reviewed by committees consisting primarily of CSU and UC faculty. What features of a course outline can assist in conveying the essential depth, breadth, quality, and appropriateness of a course as they relate to these general education standards?

Courses can fail to receive approval for certification in a general education area in both systems for a variety of reasons. Very common is a simple failure to meet the subject matter requirement of the area. For example, a psychobiology course may not be rooted in the "principles which form the foundations of living systems" (CSU/GE Area B: Physical Universe and Its Life Forms), that is, it does not cover enough general biology. Or a survey course in consumer chemistry may not "emphasize experimental methodology" (IGETC Subject Area: Physical and Biological Sciences), that is, it just describes and imparts facts rather than promoting experimental inquiry. Another problem is the course which is too narrow in focus. For example, a special topics course in women's literature may be a valuable course but may not be appropriate for general education if it just covers American Anglo writers rather than being "designed to develop a historical understanding of major civilizations and cultures, both Western and nonWestern, and an understanding and appreciation of the contributions and perspectives of women
and of ethnic and other minorities" (IGETC Subject Area: Arts and Humanities).
Even courses that have appropriate breadth and focus may fail because the course outlines do not show an integrated approach. A required component such as "exposure to both Western cultures and non-Western cultures" (CSU/GE Area C: Arts, Literature, Philosophy and Foreign Languages) may appear in the course objectives but not in the content, assignments, or student evaluation. Occasionally, one of these necessary components is missing or is so tersely written as to provide insufficient basis for evaluation. The use of forms which "check off" such expected items as "essay tests" leave the reviewer without adequate insight into the content of what will be tested.

Finally, some course outlines just do not show a dedication to quality, currency, and completeness. For example, courses are routinely rejected if they do not refer to a text (or other appropriate instructional material) or refer to a text which is outdated.

## ACCREDITATION REQUIREMENTS

The Accrediting Commission for Community and Junior Colleges, a commission of the Western Association of Schools and Colleges (WASC), regularly assesses participating colleges on the basis of eight accreditation standards. Standard Two, Educational Programs, appears in the appendix.

The entirety of Standard Two could not be achieved without strong course outlines. Indeed, documentation for the standard requires current course outlines and objectives for all programs. That said, four provisions stand out in particular.

2A. 5 Program and course objectives clearly specify the subject matter to be covered, the intellectual skills to be acquired and learning methods used, the affective and creative capabilities to be developed, and the specific occupational skills to be mastered.

2B. 2 The institution engages in periodic review of program and departmental quality and effectiveness under clearly specified and demonstrably implemented procedures.

2C. 1 The general education segment of all educational programs is based on a philosophy and rationale that are clearly stated and provides the criteria by which the appropriateness of each course in the general education component is evaluated.

2E. 1 Student performance is evaluated in terms of defined and published course requirements.

The essential components of the course outlines are the foundation upon which the college achieves its educational goals and upon which its accreditation rests. These components as described in Standard Two reinforce the recurrent themes already presented. Course objectives (and how those courses meet program objectives), subject matter covered, learning methods, rationale, and evaluation of student performance are all elements required by Title 5 .

Periodic review for accreditation provides an opportunity for the college community to regularly assess the appropriateness and effectiveness of its programs. Understanding the basis upon which that assessment is made is key to making the most of that opportunity. Periodic review of courses and programs--through assessment of the course outlines which describe them--is the vehicle by which that renewal can take place.

## COURSE OUTLINE OF RECORD FORMAT FOR DEGREE CREDIT COURSES

The following general sections of a typical course outline for a credit course are intended to address the needs specified in Title 5, the Curriculum Standards Handbook, CSU/GE and IGETC requirements, and WASC accreditation standards. This model course outline format is not a "recipe for success." All courses depend on the experience, training, and dedication of classroom instructors to generate the fundamental quality instruction that should be reflected in the course outline. All too many times this quality instruction goes unappreciated because of an incomplete or inadequately written course outline of record. This model is intended to convey the components of a course outline that will be expected when it is reviewed in the variety of venues described above.

The catalog description should clearly state the scope of the course, its level, and what kinds of student goals the course is designed to fulfill. For example, state "designed for engineering majors." It should be evident from the catalog description that no two courses in the curriculum are redundant.

Local and statewide approvals are based partly on an evaluation of need. One aspect of need is showing that the course plays a role in the curriculum that no other course fulfills effectively. Need statements are critical for innovative courses. Need can be demonstrated in a number of ways.

- The course is required for completion of an associate degree, a certificate, or an articulated transfer program.
- The course meets an associate degree and/or transferable general education requirement in a specific area not adequately covered by another course.
- The course meets a specified need of industry as detailed by an industry advisory committee or survey of employers.
- The course provides an alternative route to meet goals specified in other courses by students unable to benefit as fully from those other courses. (In such cases it should be made clear that the student cannot receive credit for both courses.)
- The course makes productive use of particular strengths the college has to offer and is in demand by students with transfer or occupational goals.
- The course meets an innovative subject matter or instructional need.

The outline must state the objectives of the course, that is, what students will have learned upon successfully completing the course. "Boiler plate" is strenuously discouraged! Objectives should use active verbs for observable behaviors. They must establish that critical thinking is an integral part of the course. For example, rather than "describe animal hunting behavior" state "compare and contrast social aspects of hunting tactics of major mammals."

For those courses with prerequisites or corequisites, the course outline should list those skills without which the student would be highly unlikely to succeed. (Or, for advisories, state the skills with which the student's learning in the course would be enhanced.) The basis for these statements of skills is the professional judgment of the instructors in the discipline. Together with a comparison with the exit skills from the prerequisite course, this section is the basis of the required content review.

The central component of the outline is the course content. This section should include a complete listing of the topics taught in the course. They should be arranged by major headings with subtopics. The content may include the perspective from which topics are taught, such as "social aspects of mammal hunting tactics."

The type or examples of methods of instruction should be specifically related to the course objectives. They should provide real guidance to instructors in designing their class sessions. For example, rather than stating "lecture" the description might be "lecture and demonstration by instructor, with in-class practice, including feedback, coaching, and evaluation by the instructor."

Assignments should be directly related to the objectives of the course. They should be specific enough to provide real guidance to faculty and clear expectations for students. A description of the type or examples of assignments are required. For example, rather than "term paper" state "term paper comparing and contrasting the social aspects of the hunting tactics of two mammal species." This section must establish that the work is demanding enough in rigor and independence to fulfill the credit level specified. The nature of the assignments must clearly demand critical thinking. Assignments should be adequate to assure that students who successfully complete them can meet the objectives of the course. Appropriate out-of-class work is required for credit courses.

Typically, a syllabus is attached to the course outline to assist in meeting the requirements of types or examples of methods of instruction, assignments, and evaluation. Remember that a syllabus differs from a course outline in several ways. A course outline is a contract between the college and the student and gives minimum required components of the course. A syllabus describes how the individual instructor will carry out the terms of this contract by giving specific dates, grading standards, and other rules of the conduct of a course required by the instructor. A syllabus allows the instructor to include methods and topics which may go beyond the course outline and gives the instructor the opportunity to bring out his or her individual talents and strengths. However, syllabi should clearly show that all instructors of the course follow the objectives, content, assignments, and evaluation to the level of rigor specified in the course outline.

Types and examples of methods of evaluation should be listed. This section should be substantively related to the stated objectives of the course. The evaluation must clearly show that critical thinking skills are required. Types or examples should be extensive enough to show that all course objectives are evaluated. Statements in this section should clearly show the basis for grading. For example, "term paper shows topic coverage, basis of comparison, and critical analysis."

Textbooks are to be listed with specific titles and date of publication. The text and other instructional materials should show the required rigor and scope. (Because of the difficulty in keeping textbook and other materials listings current, many colleges refer to a current list such as that maintained by the bookstore. If that practice is used, a current copy of that list should be attached when the course outline is submitted for review.) In degree credit courses, texts should be written for college level students, but primary sources need not be college level. If "instructordesigned materials" are the only citation, a description of their scope should be in the outline and samples included.

## SUMMARY OF COMPONENTS OF AN INTEGRATED COURSE OUTLINE OF RECORD FOR DEGREE CREDIT COURSES

$\square$ Show that the subject matter is rooted in basic theory and concepts of the discipline in each component of the course outline.
$\square$ Integrate all components throughout the outline; never just "add on."
Objectives meet the stated needs of the course.
Course Content covers all the objectives.
Methods of Instruction are identified with particular course objectives.
Assignments and Evaluation clearly show how students attain all objectives.
Texts are of college level and cover the theory and principles of the subject.
$\square$ Pay particular attention to critical thinking.
CATALOG DESCRIPTION
$\square$ Write a short paragraph as a well developed overview of topics covered.
$\square$ Identify the target audience: required for major, degree or certificate, transfer, etc. "Meets general education laboratory science requirement" for example.
List prerequisites, corequisites, and/or advisories.
Include lecture/lab/studio hours and units.

## NEED/JUSTIFICATION/GOALS

$\square$ State fulfillment of degree, certificate, transfer or other need.
$\square$ Distinguish purpose as related to similar courses.
$\square$ Clearly state goals to allow evaluation of objectives.

## PREREQUISITE SKILLS

$\square$ For pre- and corequisites list entry skills without which student success is highly unlikely: "upon entering the course the student should be able to...."
$\square$ For advisories list entry skills which would broaden or enhance student learning but without which the student would still succeed.

## OBJECTIVES

$\square$ State in measurable terms what students will be able to do: "upon completion of the course the student should be able to...."
$\square$ Be concise but complete: ten is too many; one is not enough.
$\square$ Use verbs showing analysis: rather than "understand," "identify" or "describe" say "explain" or "compare and contrast."
$\square$ Adequately cover theory, principles, and concepts. Use skills and applications to reinforce and develop concepts. Don't add concepts to supplement skills.
$\square$ Be broad and introductory in scope, not too advanced, narrow, or specific.

## COURSE CONTENT

$\square$ Compile a complete list of all topics taught in the course.
$\square$ Arrange the list by topic with sub-headings; half a page is not enough.

## METHODS OF INSTRUCTION

$\square$ Use methods appropriate to the objectives. If an objective is self-criticism of original work, lecture as a method is not enough.
$\square$ Types or examples of methods of instruction as well as assignments and how they are evaluated [see below] are required. If all instructors agree, the course outline may show just one teaching pattern. However, instructors have the academic freedom to choose how they will achieve course objectives. If other methods are used, options should be described fully. Detail may be reduced by attaching syllabi with enough information to evaluate instructional methodology.

## ASSIGNMENTS AND METHODS OF EVALUATION

$\square$ Give assignments that reflect coverage of all objectives and content.
$\square$ In addition to listing graded assignments, give the basis for grading, and relate to skills and abilities in objectives. For example, say "written assignments which show development of self-criticism." Attach examples if needed.
Out-of-class assignments must be sufficient to show independent work.
Be sure that knowledge of required material constitutes a significant portion of the grade as reflected in assignments and methods of evaluation.

TEXTS/INSTRUCTIONAL MATERIALS
$\square$ Include text (with date of publication) and other instructional material.

## PROCESS OF COURSE OUTLINE REVISIONS

As a faculty member, you are charged with constructing effective curricula which meet the needs of students and also the requirements of statutes, regulations, and guidelines of reviewing bodies. The task involves melding your professional skills within the framework of those requirements.

A key aspect of producing effective and appropriate course outlines is training, both of curriculum committee members and of the faculty in general. Begin with a subcommittee of dedicated curriculum committee members. Use the resources available both on and off campus. Your college has a wealth of knowledge in its articulation officer, transfer center director, chief instructional officer, curriculum chair, academic senate president, and matriculation coordinator. Use their expertise in training those who write and review course outlines. A number of excellent resources are just a phone call (or e-mail!) away. The appendix gives the names and addresses of those responsible for curriculum review and articulation in the Academic Senate, Chancellor's Office, California State University and University of California. The members of the Academic Senate Curriculum Committee are particularly interested in providing workshops to your campus faculty.

Use this core group of trained on-campus faculty to work with other faculty. When the faculty in a given discipline is revising its curriculum, have one of these trainers go out to their meetings and work with them directly. In the vast majority of cases, the primary hurdle is the writing of the course outline of record, not major revisions to the course itself. As taught in the classroom--but
all to often not reflected in the outline--most of our courses do, indeed, meet the requirements cataloged in this paper.

Develop a college curriculum handbook which includes the information on standards and process that faculty must have to design, review, and approve courses, the step-by-step procedures for getting a course outline reviewed and approved, and key contact people to assist with the process. Most colleges use a check-off list to assure that everything is in place. While such check-off lists are not part of the course outline, they do assist those involved in the process in making sure that all steps have been followed. A word of caution is appropriate here. Checking off a box that a required component, such as critical thinking, has been met is not sufficient. The course outline itself must demonstrate that all required components, such as critical thinking, are an integral part of the course. Often the college curriculum handbook will provide examples of various types of course outlines: general education, non-credit, non-degree-applicable, vocational certificate, etc. Annotations on these samples stating the purpose of each of the components are also useful.

The effort of revising and upgrading our course outlines of records should continue to be a priority for those of us in the classroom. It is through our unique approaches to curriculum that community colleges continue to contribute to and enhance higher education in California and the nation. Our curriculum, as expressed in our course outlines, assures those in business and industry that our students are prepared for their careers and assures our university colleagues that our students are ready for upper division work. The course outline of record is our work product, based on years of collaborative effort, that testifies to the academic integrity of our classes, programs, institution, and system.

## APPENDIX 1 - TITLE 5 REGULATIONS

[Specific sections of Title 5 of the California Administrative Code have been excerpted to aid in the review of required components for the course outline of record. Readers should consult the complete text of the regulations to place all excerpted sections in proper context. Some words and phrases have been placed in bold type for emphasis.]

## Chapter 6. Curriculum and Instruction <br> Subchapter 1. Programs, Courses and Classes <br> Article 1. Program, Course and Class Classification and Standards

55002. Standards and Criteria for Courses and Classes
(a) Associate Degree Credit Course.

An associate degree credit course is a course which has been designated as appropriate to the associate degree in accordance with the requirements of Section 55805.5 and which has been recommended by the college and/or district curriculum committee and approved by the district governing board as a collegiate course meeting the needs of the students eligible for admission.
(1) Curriculum Committee

The college and/or district curriculum committee recommending the course shall be established by the mutual agreement of the college and/or district administration and the academic senate. The committee shall be either a committee of the academic senate or a committee that includes faculty and is otherwise comprised in a way that is mutually agreeable to the college and/or district administration and the academic senate.
(2) Standards for Approval

The college and/or district curriculum committee shall recommend approval of the course for associate degree credit if it meets the following standards:
(A) Grading Policy. The course provides for measurement of student performance in terms of the stated course objectives and culminates in a formal, permanently recorded grade based upon uniform standards in accordance with Section 55758 of this Division. The grade is based on demonstrated proficiency in the subject matter and the ability to demonstrate that proficiency, at least in part, by means of essays, or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students.
(B) Units. The course grants units of credit based upon a relationship specified by the governing board, between the number of units assigned to the course and the number of lecture and/or laboratory hours of performance criteria specified in the course outline. The course also requires a minimum of three hours of work per week, including class time, for each unit of credit, prorated for short term, laboratory and activity courses.
(C) Intensity. The course treats subject matter with a scope and intensity that requires students to study independently outside of class time.
(D) Prerequisites and Corequisites. When the college and/or district curriculum committee determines, based on a review of the course outline of record, that a student would be highly unlikely to receive a satisfactory grade unless the student has knowledge or skills not taught in the course, then the course shall require prerequisites or corequisites that are established, reviewed, and applied in accordance with the requirements of Article 2.5 (commencing with Section 55200) of this Subchapter.
(E) Basic Skills Requirements. If success in the course is dependent upon communication or computation skills, then the course may require, consistent with the provisions of Article 2.5 (commencing with Section 55200) of this Subchapter, as prerequisites or corequisites eligibility for enrollment in associate degree credit courses in English and/or mathematics, respectively.
(F) Difficulty. The course work calls for critical thinking and the understanding of concepts determined by the curriculum committee to be at college level.
(G) Level. The course requires learning skills and a vocabulary that the curriculum committee deems appropriate for a college course.
(3) Course Outline of Record

The course is described in a course outline of record that shall be maintained in the official college files and made available to each instructor. The course outline of record shall specify the unit value, scope, objectives, and content in terms of a specific body of knowledge. The course outline shall also specify types or provide examples of required reading and writing assignments, other outside of class assignments, instructional methodology and methods of evaluation for determining whether the stated objectives have been met by students.
(4) Conduct of the Course

All sections of the course are to be taught by a qualified instructor in accordance with a set of objectives and with other specifications defined in the course outline of record.
(5) Repetition.

Repeated enrollment is allowed only in accordance with provisions of Chapter 2 (commencing with Section 51000), Sections 55761-55763 and 58161 of this Division.

### 55002.5. Credit Hour; Allowance for Shorter Term.

One credit hour of community college work is approximately three hours of recitation, study, or laboratory work per week throughout a term of 16 weeks. Where a term is more or less than 16 weeks, more or less than one credit hour shall be allowed in the same ratio that the length of the term is to 16 weeks.

## Article 2.5. Prerequisites, Corequisites, and Recommended Preparation

55201. Policies for Prerequisites, Corequisites, and Advisories on Recommended Preparation.
(a) The governing board of a community college district may establish prerequisites, corequisites, and advisories on recommended preparation, but must do so in accordance with the provisions of this Article. Nothing in this subchapter shall be construed to require a district to establish prerequisites, corequisites, or advisories on recommended preparation; provided however, that a prerequisite or corequisite shall be required if the course is to be offered for associate degree credit and the curriculum committee finds that the prerequisite or corequisite is necessary pursuant to Section 55002(a)(2)(D) or 55002(a)(2)(E).
(b) A governing board choosing to establish prerequisites, corequisites, or advisories on recommended preparation shall, in accordance with the provisions of Sections 53200-53204 of this Division, adopt policies for the following:
(1) The process for establishing prerequisites, corequisites, and advisories on recommended preparation. Such policies shall provide that in order to establish a prerequisite or corequisite, the prerequisite or corequisite must be determined to be necessary and appropriate for achieving the purpose for which it is being established. District policies
shall also specify the level of scrutiny that shall be required in order to establish different types of prerequisites, corequisites, and advisories on recommended preparation. At a minimum, prerequisites, corequisites, and advisories on recommended preparation shall be based on content review, with additional methods of scrutiny being applied depending on the type of prerequisite or corequisite being established. The policy shall provide that the types of prerequisites described in Subsection (e) may be established only on the basis of data collected using sound research practices. Determinations about prerequisites and corequisites shall be made on a course-by-course and program-by-program basis.
(2) Procedures to assure that courses for which prerequisites or corequisites are established will be taught in accordance with the course outline, particularly those aspects of the course outline that are the basis for justifying the establishment of the prerequisite or corequisite.
(3) The process, including levels of scrutiny, for reviewing prerequisites and corequisites to assure that they remain necessary and appropriate. These processes shall provide that at least once each six years all prerequisites and corequisites established by the district shall be reviewed. These processes shall also provide for the periodic review of advisories on recommended preparation.

## The Model District Policy [on Prerequisites, Corequisites, and Advisories]

[The model] provides for all requirements of state law, [and] a district which simply adopts this model and submits it as its local policy will thereby have met all related provisions of law and will receive prompt approval and support by the Chancellor's Office. If, however, the district believes it has a better way to establish, review, and provide for challenges to prerequisites, corequisites, advisories, and limitations on enrollment, it is welcome to adopt the policies it deems most advisable and, then, to submit that policy to the Chancellor together with a rationale for changes in the crucial areas of the model.
II. Review of Individual Courses
A. Prerequisites and Corequisites

1. Levels of Scrutiny
b. Sequential Courses Within and Across Disciplines

A course may be established as a prerequisite or corequisite for another course provided that, in addition to the review by faculty in the department or discipline and by the curriculum committee as described above, skills, concepts and/or information taught in the first course are presupposed in the second course, and a list of the specific skills and/or knowledge a student must possess in order to be ready to take the second course is included in its outline of record.
55805.5. Types of Courses Appropriate to the Associate Degree.

The criteria established by the governing board of a community college district to implement its philosophy on the associate degree shall permit only courses that conform to the standards specified in section 55002(a) and that fall into the following categories to be offered for associate degree credit:
(a) All lower division courses accepted toward the baccalaureate degree by the California State University or University of California or designed to be offered for transfer.
(b) Courses that apply to the major in non-baccalaureate occupational fields.
(c) English courses not more than one level below the first transfer level composition, typically known as English 1A. Each student may count only one such course as credit toward the associate degree.
(d) All mathematical courses above and including Elementary Algebra.
(e) Credit courses in English and mathematics taught in or on behalf of other departments and which, as determined by the local governing board, require entrance skills at a level equivalent to those necessary for the courses specified in sections (c) and (d) above.
55000.5. Handbook; Monitoring and Review of Approved Courses and Programs.
(a) The Chancellor shall prepare, distribute, and maintain a detailed handbook for use by the local educational agencies. The handbook shall contain course approval criteria, implementation plans for administrative regulations, and procedures for securing course and program approvals.
(b) The Chancellor shall monitor and review courses and programs which were approved under the provisions of section 70901 of the Education Code for compliance with applicable statutes and regulations on a periodic basis.
[Excerpts from this Handbook are presented in the next Appendix.]
Chapter 6. Curriculum and Instruction Subchapter 4. Article 2. Distance Education
55352. Number of Students.

The number of students assigned to any one course section offered by distance education shall be determined by and be consistent with other district procedures related to faculty assignment. Procedures for determining the number of students assigned to a course section offered by distance education may include a review by the curriculum committee established pursuant to Section 55002(a)(1).

## 55376. Instructor Contact

In addition to the requirements of Section 55002 and any locally established requirements applicable to all courses, district governing boards shall ensure that:
(a) Each section of a credit transferable course which is delivered as distance education shall include regular personal contact between instructor and students, through group or individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, or other in-person activities. Personal contact may be supplemented by telephone contact and correspondence.
(b) All other approved courses offered by distance education shall include regular contact between instructors and students consistent with guidelines issued by the Chancellor pursuant to Section 409 of the Procedures and Standing Orders of the Board of Governors.
55378. Separate Course Approval.

Each proposed or existing course, if delivered by distance education, shall be separately reviewed and approved, according to the district's certified course approval procedures.

## APPENDIX 2 - CURRICULUM STANDARDS HANDBOOK SECTIONS

The Curriculum Standards Handbook has been prepared by the Chancellor's Office staff as required by Title 5 Section 55000.5. Its policies and procedures have been reviewed by the Academic Senate, Chief Instructional Officers, and Chief Student Services Officers. Only relevant sections appear here.

### 1.3 Course and Program Approval Criteria

This section specifies the five criteria used by the Chancellor's Office to approve courses and programs. Courses or programs whose documentation does not demonstrate that all of these criteria are met cannot be approved by that office. Any state disapproval must be justified in terms of the failure to meet one or more of these criteria. Colleges that have delegated credit course approval authority are similarly obligated by the third condition of that delegation to disapprove new courses, and to not recommend for state approval new program proposals, whose Outlines of Record and other documentation fail to demonstrate that all five of the criteria listed below are met.

### 1.3.1 Appropriateness to Mission

The objectives of the proposed course or program, as defined in the course Outline of Record and the catalog description of the program, are consistent with the mission of the community colleges as formulated in Title 5, sections 55130(b)(5), 55180, and with the mission and comprehensive or master plan of the college.
1.3.2 Need

There is a demonstrable need for a course or program that meets the objectives as stated at this time and in the region the college proposes to serve with the program.
1.3.3 Quality

Courses and programs are designed to effectively meet their objectives and the objectives of the programs for which they are required. Outlines of Record for each course meet the standards outlined in Section 1.4 and explained in the instructions for new program application in Appendix A under Item \#24 and in Appendix B.
1.3.4 Feasibility

The college has the resources to maintain the course or program in which the course is required at the level of quality described in the course Outline of Record and the new program application. Local approval procedures for new curriculum incorporate a detailing of costs sufficient to determine that this criterion can be fulfilled by the college.
In the case of programs, the college's affirmation of its ability to offer the program is based at least partly upon an analysis of such cost estimates and includes a commitment to offer the required courses with sufficient frequency to meet the program objectives and enrollment projections, i.e. at least once every two years unless the objectives and rationale for the particular program justify a longer time frame as in the best interests of students.
1.3.5 Compliance

The course or program complies with any other laws applicable to it, including federal regulations, licensing requirements, and the particular legal requirements for courses explained in 1.4.8 of this Handbook. [Section 1.4.8 of the Handbook deals with special classes for the disabled, Section 56028.]

### 1.4.1 General Standards for Associate Degree and General Education Courses

Courses approved through the local curriculum review process as suitable for the fulfillment of
associate degree and general education requirements must reflect an understanding by those reviewing the courses of both Board of Governors expectations and those of the other segments. The standards for the Community College associate degree and general education courses are covered in this section.
In general, the Outlines of Record for courses that are to count towards the associate degree must integrate subject-specific critical thinking and problem solving skills into every component of the course, wherever appropriate, to yield a coherent course in which the expectations laid out in the objectives are carried into the content, student assignments, and standards for student evaluations.

## Appendix A-Application Forms and Instructions for New Degree and Certificate Programs

## 24. Outlines of Record for All Required Courses

From the objectives in the Outlines of Record for each required course, it should be evident how all the courses required do in fact support the objectives of the program, why they are required, and why they are sequenced as they are. If this relationship is not evident for a given course, its relationship should be fully explained in the rationale, Item \#10.
In any associate degree program, including even those designed exclusively for occupational preparation, e.g. secretarial services or small business management, the course content and set of requirements should emphasize principles, providing not only the skill to engage in current practices but also the critical perspective to evaluate and improve upon these practices.

## Appendix B - New Program Application

1. Mission

Are the objectives of the proposed course or program, as stated in the program application, consistent with the mission of the community colleges...?
2. Need

Is there a demonstrable need for a course or program that meets the objectives as stated at this time and in the region the college proposes to serve with the program?
3. Quality

Are the objectives of each required course clearly necessary to meet the stated goals and objective of the program? Are they sufficient? Will the successful completion of the work as laid out in the outlines of record submitted for each course required in the program, and in the required sequence, be sufficient to enable students to fulfill the program goals and meet the stated program objectives? Are the outlines of record for each course complete, rigorous, current, and effective?
a. Completeness.

Does the standard format for outlines of record used by the college encourage complete information, as required by Title 5, section 55002(a)(3)? Are the examples of textbooks, teaching methods, assignments and evaluation ... of sufficient substance and specificity...?
b. Rigor.

Do the stated objectives of the course meet the standards expected by those who are accepting the course as fulfilling the purposes for which it is designed...? Specifically, does the course meet the standards of 55002(a) regarding critical thinking, writing, evaluation and grading at the college level? Do the objectives include some that call for
course-specific critical thinking? Are these objectives carried through in the remainder of the outline making clear how critical thinking will be taught, required, and evaluated...?
c. Currency.

Does the course content, textbooks, software, and other materials, including library assignments, represent current or emerging knowledge and practice for that subject or occupation?
d. Effectiveness.

Are the course objectives comprehensive enough that it is possible to trace the reason for each of the course specifications by reference to at least one course objective? Is each objective implemented in at least one course specification?
4. Feasibility

Can the college commit the resources necessary to support the program at the level of quality presupposed in the program design, for the proposed numbers of students, and offer it with sufficient frequency to meet the program objectives and enrollment projections?
5. Compliance

Does the program comply with any other laws applicable to it, including federal regulations, licensing requirements, and the particular legal requirements explained in 1.4.8 of this Handbook?

### 2.4 Conditions for Delegated Approval

Colleges must demonstrate, by their documented actions and practices, that all credit courses locally approved under this delegation of state powers meet the relevant state standards. Documentation that the conditions for delegation are being met must be maintained by a college. A Delegation Checklist detailing the documentation requirements is in Appendix D. This checklist is to be submitted to the Chancellor annually according to a schedule that will be published during 1995.

### 2.4.1 Knowledge

The first condition is that faculty and staff charged with curriculum review will be knowledgeable of state standards and requirements for curriculum review and approval and of the information in this Handbook and related materials on curriculum design and instructional methods.

### 2.4.2 Procedures

The second condition is that the procedures employed both by the curriculum committee and in other phases of the local curriculum development and approval process assure that standards will be applied with consistency and rigor to different cases. Relevant indicators include:
a) Reviewers follow a process that is systematic and well-publicized and that includes both those with disciplinary expertise in the subject matter at issue and those outside the discipline who are affected by the course.
b) Handbooks, checklists, and model outlines, or other aids, used in the review process, correctly address this Handbook's standards.
c) Faculty are accorded the scope of responsibilities mandated in law.
d) Reviewers are provided with information all of the current standards in Volume I of this Handbook and on course or programs to be reviewed sufficient to enable them to apply these
standards independently and appropriately.

### 2.4.3 Curriculum

The third condition is that continuing delegation requires that colleges be able to assure that they produce approvable Course Outlines of Record that are in compliance with the standards specified in Sections 3 and 5 of Volume I of this Handbook; and would typically be acceptable as meeting the requirements of transfer receiving institutions.

## APPENDIX 3-CSU/GE STANDARDS

Executive Order No.: 595
Title: General Education-Breadth Requirements
Effective Date: January 1, 1993
Supersedes: Executive Order No.338,342
This Executive Order is issued pursuant to Title 5, California Code of Regulations, Sections 40402.1, 40405, 40405.1, and 40405.4, and Sections I and 2 of Chapter III of the Standing Orders of the Board of Trustees of the California State University.

The requirements, policies, and procedures adopted pursuant to this Executive Order shall apply to students enrolling in fall 1981 and subsequent terms who have not previously been enrolled continuously at a campus of the CSU or the California Community Colleges and who have not satisfied lower-division general education requirements according to the provisions of Sections 40405.2 or 40405.3 of Title 5.
I. Scope and Purpose

This Executive Order is intended to establish a common understanding about CSU General Education Breadth Requirements (pathway A below) and to provide for certification by regionally accredited institutions of the extent to which transfer students have met these requirements. Reciprocity among the CSU campuses for full and subject-area completion of lower-division General Education-Breadth Requirements is also addressed in this Executive Order.

Policies adopted by the Board of Trustees in July 1991 provide for three ways for undergraduate students to fulfill general education requirements of the CSU:
A. Fulfillment of CSU General Education-Breadth Requirements (Title 5, Section 40405.1), including a minimum of nine semester units or twelve quarter units at the CSU campus granting the baccalaureate degree.
B. Completion of the Intersegmental General Education Transfer Curriculum (Title 5, Section 40405.2), as certified by a California community college, plus a minimum of nine upper-division semester units or twelve upper-division quarter units at the CSU campus granting the baccalaureate degree.
C. Completion of lower-division general education requirements of a University of California campus (Title 5, Section 40405.3), as certified by that campus, plus a minimum of nine upper-division semester units or twelve upper-division quarter units at the CSU campus granting the baccalaureate degree. Implementation of this alternative is contingent on development of a formal agreement between the California State University and the University of California.

## II. Campus Responsibility

A. The faculty of a CSU campus has primary responsibility for developing and revising the institution ' s particular General Education-Breadth program. Trustee policy describes broad areas of inquiry, which may be viewed from various disciplinary and interdisciplinary perspectives. Within the framework provided, each CSU campus is to establish its own requirements and exercise its creativity in identifying courses and disciplines to be included within its General Education-Breadth program. In undertaking this task, participants should give careful attention to the following:

1. Assuring that General Education-Breadth Requirements are planned and organized so that their objectives are perceived as interrelated elements, not as isolated fragments.
2. Considering the organization of approved courses into a variety of "cores" or "themes," each with an underlying unifying rationale, among which students may choose.
3. Evaluating all courses approved as meeting current General Education-Breadth Requirements to determine which continue to meet the objectives and particular requirements contained herein.
4. Considering development of new courses as they may be necessary to meet the objectives and particular requirements contained herein.
5. Considering the possibility of incorporating integrative courses, especially at the upper division level, which feature the interrelationships among disciplines within and across traditional general education categories.
6. Providing for reasonable ordering of requirements so that, for example, courses focusing on learning skills will be completed relatively early and integrative experiences, relatively later.
7. Developing programs that are responsive to educational goals and student needs, rather than programs based on traditional titles of academic disciplines and organizational units.
8. Considering possibilities for activity as well as observation in all program subdivisions.
9. The effectiveness of a General Education-Breadth program is dependent upon the adequacy of curricular supervision, its internal integrity and its overall fiscal and academic support. Toward this end, each campus shall have a broadly representative standing committee, a majority of which shall be instructional faculty, and which shall also include student membership, to provide for appropriate oversight and to make appropriate recommendations concerning the implementation, conduct and evaluation of these requirements.
C. Each campus shall provide for systematic, readily available academic advising specifically oriented to general education as one means of achieving greater cohesiveness in student choices of course offerings to fulfill these requirements.
D. Each campus shall provide for regular periodic reviews of general education policies and
practices in a manner comparable to those of major programs. The review should include an off-campus component.

## III. Objectives of CSU General Education-Breadth Requirements

General Education-Breadth Requirements are to be designed so that, taken with the major depth program and electives presented by each baccalaureate candidate, they will assure that graduates have made noteworthy progress toward becoming truly educated persons. Particularly, the purpose of these requirements is to provide means whereby graduates:
A. will have achieved the ability to think clearly and logically, to find information and examine it critically, to communicate orally and in writing, and to reason quantitatively;
B. will have acquired appreciable knowledge about their own bodies and minds, about how human society has developed and how it now functions, about the physical world in which they live, about the other forms of life with which they share that world, and about the cultural endeavors and legacies of their civilizations;
C. will have come to an understanding and appreciation of the principles, methodologies, value systems, and thought processes employed in human inquiries.

The intent is that General Education-Breadth Requirements be planned and organized to enable students to acquire abilities, knowledge, understanding, and appreciation as interrelated elements, not as isolated fragments.

## IV. Entry-Level Learning Skills

Title 5 of the California Code of Regulations, Section 40402.1, provides that each student admitted to the California State University is expected to possess basic competence in the English language and mathematical computation to a degree that may reasonably be expected of entering college students. Students admitted who cannot demonstrate such basic competence should be identified as quickly as possible and be required to take steps to overcome their deficiencies. Any coursework completed primarily for this purpose shall not be applicable to the baccalaureate degree.

## V. Distribution of General Education-Breadth Units

Every baccalaureate graduate who has not completed the program specified in Subsection B or C of Section I above shall have completed the program described in Subsections A through E below, totaling a minimum of 48 semester units or 72 quarter units. At least nine of these semester units or twelve of these quarter units must be upper-division level and shall be taken no sooner than the term in which upper-division status (completion of 60 semester units or 90 quarter units) is attained. At least nine of the 48 semester units or 12 of the 72 quarter units shall be earned at the campus granting the degree.

Each campus is authorized to make reasonable adjustments in the number of units assigned to the five categories in order that the conjunction of campus course credit unit configuration
and these requirements will not unduly exceed any of the prescribed credit minima. However, in no case shall the total number of units required be less than 48 semester units or 72 quarter units. (No campus need adjust normal course credit configurations for the sole purpose of meeting the requirements specified herein.)

Instruction approved to fulfill the following requirements should recognize the contributions to knowledge and civilization that have been made by members of diverse cultural groups and by women.

## A. A minimum of nine semester units or twelve quarter units in communication in the English language, to include both oral communication and written communication, and in critical thinking, to include consideration of common fallacies in reasoning.

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 the 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.

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.
B. A minimum of twelve semester units or eighteen quarter units to include inquiry into the physical universe and its life forms, with some immediate participation in laboratory activity, and into mathematical concepts and quantitative reasoning and their applications.

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. 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.

## C. A minimum of twelve semester units or eighteen quarter units among the arts, literature, philosophy and foreign languages.

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 esthetic, 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. Studies in these areas should include exposure to both Western cultures and non-Western cultures.

Foreign language courses may be included in this requirement because of their implications for cultures both in their linguistic structures and in their use in literature; but foreign language courses which are approved to meet a portion of this requirement are to contain a cultural component and not be solely skills acquisition courses. Campus provisions for fulfillment of this requirement must include a reasonable distribution among the categories specified as opposed to the completion of the entire number of units required in one category.
D. A minimum of twelve semester units or eighteen quarter units 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. Campus provisions for fulfillment of this requirement must include a reasonable distribution among the categories specified as opposed to completion of the entire number of units required in one category.
E. A minimum of three semester units or four quarter 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.

Campuses may permit "double counting" of courses for General Education-Breadth and major requirements and prerequisites only after giving careful consideration to the impact of such actions on General Education-Breadth programs. Decisions to permit double counting in General Education-Breadth and a degree major may be made only after an approval is provided through campus wide curricular processes.

Up to six semester units taken to meet the United States History, Constitution, and American Ideals Requirement (Title S of the California Code of Regulations, Section 40404) may be credited toward satisfying General Education- Breadth Requirements at the option of the campus.

## VI. Exceptions

Exceptions to the foregoing requirements may be authorized only under the following circumstances:
A. In the case of an individual student, the campus may grant a partial waiver of one or more of the particular requirements of Title 5 of the California Code of Regulations, Section 40405.1, to avoid demonstrable hardship, such as the need to extend the time required for completion of the degree in the case of a senior level transfer student.
B. In the case of high-unit professional major degree programs, the Chancellor may grant exceptions to one or more requirements for students completing the particular program. Such exception must be considered at the campus level prior to initiating the request. A full academic justification shall be submitted to the

Senior Vice Chancellor, Academic Affairs, who shall submit his or her recommendation and that submitted by the campus president, along with all relevant documents, to the Chancellor.

## VII. General Education Advisory Committee

A system wide Advisory Committee on General Education is hereby established. While it is important that the membership of this committee be broadly based, the membership will in largest part be drawn from the instructional faculty of the California State University. Liaison membership from the instructional faculty of the California Community Colleges may be included as well.

The responsibilities of this committee will be as follows:
A. To review and propose any necessary revisions in the objectives, requirements, and implementation of CSU General Education-Breadth policy to ensure high quality general education.
B. To continue to study general education policies and practices inside and outside the system and, as appropriate, to stimulate intersegmental discussion of the development of general education curricula.
C. To review the implications of CSU General Education-Breadth policy for students transferring to the CSU and for the institutions from which they transfer, and to propose any necessary adjustments to pertinent policies and practices.
D. To report as appropriate to the Chancellor and the Board of Trustees.

The Chancellor or the Senior Vice Chancellor, Academic Affairs, may from time to time request the committee to address and provide advice on other issues related to development and well-being of General Education Breadth policy and programs in the California State University.
VIII. Certification by Non-CSU Regionally Accredited Institutions of Transfer Students ' Fulfillment of CSU General Education-Breadth Requirements

## Premises

1. It is the joint responsibility of the public segments of higher education to ensure that students are able to transfer without unreasonable loss of credit or time.
2. The faculty of an institution granting the baccalaureate degree have primary responsibility for maintaining the integrity of the degree program and determining when requirements have been met.
3. There shall ordinarily be a high degree of reciprocity among regionally accredited institutions in the absence of specific indications that such reciprocity is not appropriate.

## B. Conditions for Participation

Any institution that is accredited by a recognized regional accrediting association and that offers the BA or BS degree or the first two years of such degree programs may participate in General Education-Breadth certification if it agrees to the following provisions:

1. The participating institution shall designate a liaison representative who shall participate in various orientation activities and provide other institutional staff with pertinent information.
2. The participating institution shall identify for certification purposes those courses or examinations that fulfill the objectives set forth in Section m of this Executive Order and such additional objectives as may be promulgated by the Chancellor of the California State University.
a. The courses and examinations identified should be planned and organized to enable students to acquire abilities, knowledge, understanding, and appreciation as interrelated elements, not as isolated fragments.
b. Interdisciplinary courses or integrated sets of courses that meet multiple objectives of
the CSU General Education-Breadth Requirements may be appropriate components of general education (c.f. Subsections A-5 and A-7 of Section [1).
c. Credit units of an interdisciplinary course or integrated set of courses may be distributed among different areas of general education, as appropriate.
3. The CSU Office of the Chancellor, Division of Academic Affairs, shall maintain a list of participating institutions' courses and examinations that have been identified and accepted for certification purposes.
a. Each entry in the list shall include specification of the area or areas and objectives to which the course or examination relates and the number of units associated with each area or objective. (See Attachment A.)
b. The list shall be updated annually. Each participating institution shall transmit annually to the CSU Office of the Chancellor, Division of Academic Affairs, any proposed changes to its portion of the list. If a course is to be added or if the specification of areas and objectives for a course is to be modified, the participating institution shall include in its submission the approved course outline. If a course is part of an integrated set of courses, the submission shall identify the set and describe how the course complements the others in the set.
c. As of the effective date of this executive order, the list will include all entries that were submitted by participating institutions and not identified for challenge under the provisions of Executive Order 342. Recognizing the integrity of faculty curricular review processes in participating institutions, the CSU expects that proposed updates will generally be acceptable. However, after the effective date of this executive order, additions or modifications of entries shall be reviewed by a subcommittee of the Advisory Committee on General Education for congruence with the areas and objectives specified. The subcommittee is to be drawn from the instructional faculty of the California State University. The subcommittee may ask the participating institution for additional materials and is encouraged to consult faculty from the California State University or California Community Colleges who have relevant expertise. The subcommittee may refer decision on acceptance of the course to the Advisory Committee on General Education. A course that is reviewed and determined to be inconsistent with the objectives with which it has been associated will not be added to the list.
d. A copy of the list shall be made available in printed or electronic form to any CSU campus or participating institution. Participating institutions are free to share their course outlines and communications from the CSU about those course outlines with other participating institutions.
e. The participating institution shall be responsible for reviewing periodically its portion of the list to assure that entries continue to be appropriate and to reflect current knowledge in the field. It is also responsible for reapproving entries that are found to have remained appropriate and for directing to the subcommittee of the Advisory Committee on General Education any questions such updating of the courses may
have raised as to their congruence with CSU General Education-Breadth areas and objectives.
4. The participating institution shall report certification for individual students in a format to be specified.

## C. Acceptance of Certification

CSU campuses shall accept full certification or subject-area certification, as defined below, by participating institutions. Students admitted to a CSU campus with full certification may not be held to any additional lower- division general education requirements; students admitted to a CSU campus with subject-area certification may not be held to any additional lower-division general education coursework in the subject areas certified. Neither full certification nor subject-area certification exempts students from unmet lower-division graduation requirements that may exist outside of the general education program of the campus awarding the degree.

1. To qualify for full certification, a student must satisfactorily complete no fewer than 39 lower division semester units or 58 lower-division quarter units of instruction appropriate to meet the objectives of Sections m and V . The units must be distributed as follows, except as specified in Subsection 3 below:
a. In Area A , no fewer than nine semester units (12-15 quarter units), including instruction in oral communication, written communication and critical thinking.
b. In Area B, no fewer than nine semester units (12-15 quarter units), including instruction in physical science and life science at least one part of which must include a laboratory component -and mathematics/quantitative reasoning.
c. In Area C, no fewer than nine semester units (12-15 quarter units), with at least one course in the arts and one in the humanities (see Attachment A).
d. In Area D, no fewer than nine semester units (12-15 quarter units), with courses taken in at least two disciplines (see Attachment A).
e. $\ln$ Area E, no fewer than three semester units (65 quarter units).
2. To qualify for subject-area certification, a student must satisfactorily complete instruction appropriate to meet the objectives of one or more subsections of Section V. The units must be distributed as follows, except as specified in Subsection 3 below:
a. For Area $A$, no fewer than nine semester units (12-15 quarter units), including instruction in oral communication, written communication, and critical thinking. A single course may not he certified as meeting more than one subarea for any given student.
b. For Area B, no fewer than nine semester units (12-15 quarter units), including
instruction in physical science and life science at least one part of which must include a laboratory component-and mathematics/quantitative reasoning. A single course may not be certified as meeting more than one subarea for any given student, except for laboratory components incorporated into a physical or life science course.
c. For Area C, no fewer than nine semester units (12-15 quarter units), with at least one course in the arts and one in the humanities (see Attachment A).
d. For Area D, no fewer than nine semester units (12-15 quarter units), with courses taken in at least two disciplines (see Attachment A).
e. For Area E, no fewer than three semester units (4-5 quarter units).
3. Exceptions to restrictions above may be made for programs in which instruction is integrated into a set of courses or into interdisciplinary courses designed to meet multiple objectives. Interdisciplinary courses in this case would be expected to be offered at an appropriately greater number of units.
D. Limitations on Certification of Students
4. A participating institution may not certify a student for more than 39 semester units or equivalent. If more than one participating institution certifies a student, the CSU campus granting the degree need not accept certification for more than 39 semester units or equivalent.
5. A CSU campus need accept as certified for a given subject area no more than the minimum numbers of units specified in Subsections A through E in Section V above.
6. A participating institution may certify a student for no more than 30 semester units (45 quarter units) total in subject areas $B$ through $D$ combined. If more than one participating institution certifies a student, the CSU campus granting the degree need not accept certification for more than 30 semester units ( 45 quarter units) total in subject areas B through D combined.
7. Baccalaureate-granting institutions certifying a student for units earned in upper-division courses or examinations may provide certification only for those units that were completed during or after the term in which the student achieved upper-division status (i.e., earned a total of at least 60 semester units or 90 quarter units).
8. A participating institution may certify completion of courses or examinations taken at other eligible institutions, provided that all such courses and examinations would be identified for certification purposes by the institution offering them. If so identified, those courses and examinations shall contribute to qualification of a student for full certification or subject-area certification, as appropriate.
9. Upon transfer, no student shall be required to complete more units in general educationbreadth than the difference between the number certified in accordance with this executive
order and the total units in general education-breadth required by the campus granting the degree.

## IX. Lower-Division General Education Reciprocity Among CSU Campuses

A. Lower-division general education requirements designated by CSU campuses as having been satisfactorily completed in their entirety shall be recognized as fulfilling all lower division general education requirements of the CSU campus granting the baccalaureate degree without regard to differences that may exist between the two programs. (A course or examination is to be regarded as satisfactorily completed if the student's performance meets the minimum standards for full acceptance toward satisfying a requirement as set by the campus at which the course or examination was taken.) For the purposes of this section, completion of lower-division general education requirements is equivalent to qualification for full certification, as defined in Subsection C of Section VIII above. Transfer students admitted with documentation of full lower-division general education program completion at another CSU campus may not be held to any additional lowerdivision general education requirements by the campus awarding the degree.
B. Lower-division general education subject-area requirements designated by CSU campuses as having been satisfactorily completed, shall be recognized as fulfilling the corresponding subject-area general education requirements of the CSU campus granting the baccalaureate degree without regard to differences that may exist in the configuration of the two programs or in the content of the subject area. For the purposes of this section, completion of lower-division general education subject-area requirements is equivalent to qualification for subject-area certification, as defined in Subsection C of Section VIII above. Transfer students admitted with documentation of completion of one or more general education subject areas at another CSU campus may not be held to any additional lower-division general education requirements in that subject area by the campus awarding the degree.
C. The provisions of Subsections A and B of this section do not exempt students from unmet lower-division graduation requirements of the CSU campus awarding the degree, or from lower-division courses required by individual baccalaureate majors at the CSU campus awarding the degree.
D. Students seeking to transfer under the provisions of this section shall be responsible for requesting verification that lower-division general education program or subject-area requirements have been met. Upon the request of a currently or formerly enrolled student, the CSU campus from which the student seeks to transfer shall determine the extent to which that student has satisfactorily completed the lower division general education requirements in each subject area, and shall provide official documentation of such completion.

November 20, 1992
Barry Munitz, Chancellor
Area A: Communication in the English Language and Critical Thinking
References: Sections V-A, VIII-C-I-a, VIII-C-2-a
Oral Communication ..... A1
Written Communication ..... A2
Critical Thinking ..... A3
Area B: Physical Universe and Its Life Forms
References: Sections V-B, VIII-C-1-b, VIII-C-2-b
Physical Science ..... B1
Life Science ..... B2
Laboratory Activity ..... B3
Mathematics/Quantitative Reasoning ..... B4
Area C: Arts, Literature, Philosophy and Foreign Languages
References: Sections V-C, VIII-C-1-c, VIII-C-2-c
Arts (Art, Dance, Music, Theater) ..... C1
Humanities (Literature, Philosophy, Foreign Languages) ..... C2
Area D: Social, Political, and Economic Institutions and Behavior; Historical BackgroundReferences: Sections V-D, VIII-C-I-d, VIII-C-2-d
Anthropology and Archeology ..... D1
Economics ..... D2
Ethnic Studies* ..... D3
Gender Studies* ..... D4
Geography ..... D5
History ..... D6
Interdisciplinary Social or Behavioral Science ..... D7
Political Science, Government, and Legal Institutions ..... D8
Psychology ..... D9
Sociology and Criminology ..... D0
Area E: Lifelong Understanding and Self-Development ..... E
References: Sections V-E, VIII-C-I-e, VIII-C-2-e*Ethnic Studies or Gender Studies courses emphasizing artistic or humanistic perspectives may becategorized in Area C.

# APPENDIX 4 - IGETC STANDARDS 

Adoption of the Intersegmental General Education Transfer Curriculum<br>Board of Governors<br>California Community Colleges<br>March 15, 1991

## Background

Assembly Bill 1725 (Chapter 973, Statutes of 1988) directed the governing boards of the University of California, the California State University, and the California Community Colleges, with appropriate consultation with the Academic Senates of the respective segments, to jointly "develop, maintain, and disseminate a common core curriculum in general education for the purpose of transfer," and to adopt that curriculum. The full text of that directive, as incorporated in the Education Code, reads as follows:
66720. The Board of Governors of the California Community Colleges, the Regents of the University of California, and the Trustees of the California State University, with appropriate consultation with the Academic Senates of the respective segments, shall jointly develop, maintain, and disseminate a common core curriculum in general education courses for the purposes of transfer. Any person who has successfully completed the transfer core curriculum, shall be deemed to have thereby completed all lower division general education requirements for the University of California and the California State University.
66721. Upon development of the transfer core curriculum pursuant to Section 66720, and upon any subsequent joint revision of that curriculum, the Board of Governors of the California Community Colleges, the Regents of the University of California, and the Trustees of the California State University shall jointly cause the curriculum to be published and distributed to each public school in this state that provides instruction in any of the grades 7 to 12 , inclusive, and to each community college in this state, with an emphasis on the communication of that information to each school or college having a high proportion of students who are members of one or more ethnic minorities. In addition, the Board of Governors shall distribute that transfer core curriculum to the State Board of Education, which shall apply that information to ensure, through its curriculum development activities, that public school pupils enrolled in any of the grades 9 to 12 , inclusive are aware of the academic requirements for preparation for higher education and may receive any necessary academic remediation in a timely manner.
66723. No provision of this chapter shall apply to the University of California except to the extent that the Regents of the University of California, by appropriate resolution, makes that provision applicable.

This action of the Legislature followed from recommendations in reports of the Commission to Review the Master Plan for Higher Education and the Joint Legislative Committee to Review the Master Plan. Both reports decried the confusing multiplicity of general education course requirements of the State University system and the individual campuses, colleges, and programs
of the University of California as a barrier to students who wished to transfer. The solution, all agreed, was the creation of a common set of lower-division, general education requirements that could serve as a basis for transfer to all campuses of both segments.

The Intersegmental Committee of the Academic Senates (ICAS) took up the task of responding to those recommendations in the fall of 1986, well before the AB 1725 directive took effect. (The members of ICAS committee who developed the basic proposal are listed in Appendix B.) A year earlier, the California State University (CSU) had adopted a systemwide general education pattern of courses, and, faculty at the University of California (UC) had conducted a series of studies of the general education and lower-division major requirements in several disciplines.

These separate but complimentary efforts served as a common meeting ground for development of the Intersegmental General Education Transfer Curriculum (IGETC). In less than two years, agreement had been reached on 12 of the 13 necessary courses. The final area of agreement, which concerned the nature of the second course in the "English Communication" area, was reached more than a full year later.

In the meantime, the University of California adopted the 37 -unit "interim" agreement as its systemwide Transfer Core Curriculum (TCC). The TCC will be superseded by the IGETC in fall 1991, following the latter's adoption by the three governing boards.

## Content of the Intersegmental Curriculum

The full text of the Intersegmental General Education Transfer Curriculum is contained in Appendix A. Its basic requirements are summarized below in a statement that has been endorsed by ICAS.

## Intersegmental General Education Transfer Curriculum (IGETC) <br> Summary Outline

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the California State University or University of California system without the need, after transfer, to take additional lowerdivision, general education courses to satisfy campus general education requirements.

It should be noted that completion of the IGETC is not a requirement for transfer to CSU or UC, nor is it the only way lo fulfill the lower-division, general education requirements of CSU or UC prior to transfer. Depending on a student's major and field of interest, the student may find it advantageous to take courses fulfilling CSU's general education requirements or those of the UC campus or college to which the student plans to transfer.

English
Communications:

One course, English Composition (3 sem../4-5 qtr. units); this course is a prerequisite to Critical Thinking.

One course, Critical Thinking-English Composition (3 sem./4-5 qtr.
One course, Oral Communications ( 3 sem./4-5 qtr. units).(a)
Mathematical One course, Mathematical Concepts and Quantitative
Concepts and Reasoning ( 3 sem../4-5 qtr. units).
Quantitative
Reasoning:

Art and
Humanities:

Social and
Behavioral
Sciences:

Physical and
Biological Sciences:

Three courses, at least one course in arts and at least one course in humanities ( 9 sem. /12-15 qtr. units).

Three courses in at least two disciplines within subject area ( 9 sem../12-15 qtr. units).

Two courses, one course in each area, and at least one must include a laboratory, 7-9 sem../9-12 qtr. units).

## Language Other

Than English: Proficiency equivalent to two years of high school study.(b)
(a) Students transferring to UC do not have lo meet the Oral Communication requirement.
(b) Students transferring to CSU do nol have to meet the requirement of a language other than English.

## Implementation of the Intersegmental Curriculum

As may be seen readily from the above summary, the IGETC document establishes agreement on:

- the five basic areas of general education, plus the foreign language proficiency;
- the number of courses and units required for each basic area; and
- the fundamental characteristics of courses that may be applied in each area.

The IGETC document does not, however, specify the individual courses that will fulfill each of those requirements. Each community college will have to identify and propose the courses that will apply to each requirement. The Chancellor recently transmitted a letter from the three segmental faculties to the community colleges requesting that the first such lists of courses be submitted for intersegmental review by March 15. By May 31, colleges will be advised of the courses from that list approved for the curriculum. These first lists are regarded as constituting "Phase One," with refinements and additions occurring in Phase Two for Fall 1992.

The IGETC document also does not spell out the procedures to be followed by community
colleges certifying that students have completed the requirements of the IGETC. However, the Intersegmental Committee has begun work on common certification forms and procedures, which will be provided to the colleges during spring 1991. Appendix C lists the members of the IGETC Committee

## Dissemination of the Intersegmental Curriculum

AB 1725 requires that the three segments jointly disseminate the Intersegmental General Education Transfer Curriculum, once it is approved, to all secondary schools in California and to the State Board of Education. The purpose is to encourage schools to provide the appropriate preparation to students who wish to attend college. When the IGETC has been adopted by all the segments, Chancellor's Office staff will work through the Intersegmental Coordinating Council to meet the dissemination requirement.

## Recommended Action

That the Board of Governors adopt the Intersegmental General Education Transfer Curriculum as set forth in Appendix A, and direct the Chancellor to commence dissemination and implementation activities.

## ATTACHMENT A

## INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the California State University or University of California system without the need, after transfer, to take additional lowerdivision, general education courses to satisfy campus G.E. requirements.

It should be noted that completion of the IGETC is not a requirement for transfer to CSU or UC, nor is it the only way to fulfill the lower-division, general education requirements of the CSU or UC prior to transfer. Depending on a student's major and field of interest, the student may find it better to take courses fulfilling the CSU's general education requirements or those of the UC campus or college to which the student plans to transfer. Students pursuing majors that require extensive lower-division preparation may not find the Intersegmental General Education Transfer Curriculum option to be advantageous.

Since the development of the 1960 Master Plan, ease of transfer has been the cornerstone of California's three-tiered system of higher education. Transfer issues were therefore central to the concerns of Commissioners and Legislators who recently examined and "renewed" the Master Plan for Higher Education in California.

The Academic Senates of the University of California, the California State University, and California Community Colleges responded early and quickly to the concerns about transfer raised by the Legislature and the Commission to Review the Master Plan. Among those concerns was a recommendation for the creation of a general education transfer curriculum. As faculty we share fundamental convictions about the purposes of General Education. General Education should develop students' abilities to think; general education courses should not merely transmit information, but should require analysis, criticism, and synthesis. One of the most effective tools for achieving these goals is the written essay, evaluated with attention to the quality of its writing as well as the accuracy of its content, and, as appropriate, general education courses should require significant amounts of writing. In addition, speaking, listening, and reading are important skills that general education courses should foster. Participation in the intellectual and cultural life of our society requires ability in verbal communication of all kinds.

Courses in the transfer curriculum should be culturally broad in their conception. They should help students understand the nature and richness of human culture and social structures through a comparative approach and have a pronounced historical perspective. They should recognize the contributions to knowledge, civilization, and society that have been made by women and members of minority groups.

Similarly, one of the most useful things that students should get from their general education is an understanding of the modes of inquiry that characterize the different areas of human thought: the nature of the questions that can be addressed, the way questions are formulated, the way analysis is conducted, and the validity and implications of the answers obtained.

General education should be intellectually challenging; indeed, it must be to do a responsible job
of preparing students for entry into the upper division of our four-year institutions and for full participation in the life of the state. It is equally clear that participation in such a curriculum itself requires adequate preparation. General education builds upon adequate high school preparation, and poor preparation may require students to take remedial courses prior to entry into the transfer curriculum.

Both the California State University and the University of California have a specific American Institutions requirement that is separate from their general education requirements. Completion of the Intersegmental General Education Transfer Curriculum will not satisfy this requirement.

All courses offered towards satisfaction of the requirements of the Intersegmental mental General Education Transfer Curriculum must be baccalaureate in level and must be acceptable for transfer among all segments of public postsecondary education. Advanced Placement credit that is considered equivalent to a course accepted for credit towards the Transfer Curriculum should also be acceptable. Except for the American Institutions requirements, double counting of courses (i.e., using one course to meet more than one university requirement) is not limited by the IGETC.

The following requirements are listed in terms of the number of courses specified for each designated area and the minimum number of semester and quarter units so represented.

## Subject Area: English Communication

(3 courses; 9 semester, 12-15 quarter units)*

* Students transferring to UC do not have to meet the oral communication requirement.

The English Communication requirement shall be fulfilled by completion of three semesters or nine units of lower-division courses in English reading and written composition (1 course), critical thinking-English composition (1 course), and oral communication* (1 course). Successful completion of the course in reading and written composition shall be prerequisite to the course in critical thinking-English composition. The second semester of English composition required by the University of California may be met by those courses in critical thinking taught in a variety of disciplines which provide, as a major component, instruction in the composition of substantial essays and require students to write a sequence of such essays. Written work shall be evaluated for both composition and critical thinking. Texts chosen in this area should reflect an awareness of cultural diversity. Courses designed exclusively for the satisfaction of remedial composition cannot be counted towards fulfillment of the English composition requirement.

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 the social significance of communication, including how communication operates in various situations. Applicable courses) 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.

Instruction in critical thinking is to be designed to achieve an under standing 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 identify the assumptions upon which particular conclusions depend. The mini al competence to be expected at the successful conclusion of instruction in critical thinking should be the ability to distinguish fact from judgment, and belief from knowledge, to use elementary inductive and deductive processes, and to recognize common logical errors or fallacies of language and thought.

Subject Area: Mathematical Concepts and Quantitative Reasoning
(1 course; 3 semester, 4-5 quarter units)
The Mathematical Concepts and Quantitative Reasoning requirement shall be fulfilled by completion of a one-semester course in mathematics or statistics above the level of intermediate algebra, with a stated course prerequisite of Intermediate Algebra. (See the description of "Algebra 2," Statement On Competencies In Mathematics Expected Of Entering Freshmen - 1988, revised February, 1988.) Courses on the application of statistics to a single discipline may not be used to fulfill this requirement. An appropriate course in statistics must emphasize the mathematical bases of statistics, probability theory and estimation, application and interpretation, uses and misuses, and the analysis and criticism of statistical arguments in public discourse.

Because knowledge relevant to public and private decision making is expressed frequently in quantitative terms, we are routinely confronted with information requiring quantitative analysis, calculation, and the ability to use and criticize quantitative arguments. In addition, many disciplines require a sound foundation in mathematical concepts. The requirement in Mathematical Concepts and Quantitative Reasoning is designed to help prepare students to respond effectively to these challenges.

Subject Area: Arts and Humanities
(at least 3 courses; 9 semester, 12-15 quarter units)
The Arts and Humanities requirement shall be fulfilled by completion of at least three courses which encourage students to analyze and appreciate works of philosophical, historical, literary, aesthetic and cultural importance. Students who have completed this requirement shall have been exposed to a pattern of coursework designed to develop a historical understanding of major civilizations and cultures, both Western and non- Western, and an understanding and appreciation of the contributions and perspectives of women and of ethnic and other minorities. In the Arts, students should also learn to develop an independent and critical aesthetic perspective.

At least one course shall be completed in the Arts and one in the Humanities. Within the arts area, performance and studio classes may be credited toward satisfaction of this subject area if their major emphasis is the integration of history, theory, and criticism. Courses used to satisfy the CSU United States History, Constitution and American Ideals requirement, and the UC American History and Institutions requirement may not be counted in this area but may be taken prior to transfer.

The Arts and Humanities historically constitute the heart of a liberal arts general education because of the fundamental humanizing perspective that they provide for the development of the whole person. Our understanding of the world is fundamentally advanced through the study of Western and non-Western philosophy, language, literature, and the fine arts. Inclusion of the contributions and perspectives of women and of ethnic and other minorities as part of such study will provide us a more complete and accurate view of the world and will enrich our lives.

Subject Area: Social and Behavioral Sciences
(at least 3 courses: 9 semester. 12-15 quarter units)
The Social and Behavioral Sciences requirement shall be fulfilled by completion of at least three courses dealing with individual behavior and with human social, political, and economic institutions and behavior in a minimum of two disciplines or in an interdisciplinary sequence. The pattern of coursework completed shall ensure opportunities for students to develop understanding of the perspectives and methods of the social and behavioral sciences. Problems and issues in these areas should be examined in their contemporary, historical, and geographical settings. Students who have completed this requirement shall have been exposed to a pattern of coursework designed to help them gain an understanding and appreciation of the contributions and perspectives of women and of ethnic and other minorities and a comparative perspective on both Western and non-Western societies. The material should be presented from a theoretical point of view and focus on core concepts and methods of the discipline rather than on personal, practical, or applied aspects. Courses used to satisfy the CSU United States History, Constitution and American Ideals requirement, and the UC American History and Institutions requirement may not be counted in this area but may be taken prior to transfer.

Courses in the Social and Behavioral Sciences allow students to gain a basic knowledge of the cultural and social organizations in which they exist as well as the behavior and social organizations of other human societies. Each of us is born into, lives, and must function effectively within an environment that includes other individuals. People have, from earliest times, formed social and cultural groups that constitute the framework for the behavior of the individual as well as the group. Inclusion of the contributions and perspectives of women and of ethnic and other minorities as part of such study will provide us a more complete and accurate view of the world and will enrich our lives.

## Subject Area: Physical and Biological Sciences

(at least 2 courses: 7-9 semester, 9-12 quarter units)
The Physical and Biological Sciences requirement shall be fulfilled by completion of at least two courses, one of which is in Physical Science and one in Biological Science, at least one of which incorporates a laboratory. Courses must emphasize experimental methodology, the testing of hypotheses, and the power of systematic questioning, rather than only the recall of facts. Courses that emphasize the interdependency of the sciences are especially appropriate for non-science majors.

The contemporary world is influenced by science and its applications, and many of the most difficult choices facing individuals and institutions concern the relationship of scientific and
technological capability with human values and social goals. To function effectively in such a complex world, students must develop a comprehension of the basic concepts of physical and biological sciences, and a sophisticated understanding of science as a human endeavor, including the limitations as well as the power of scientific inquiry.

## OTHER

Language Other Than English*
*Students transferring to CSU do not have to meet the requirement of proficiency in a language other than English.

Students shall demonstrate proficiency in a language other than English equal to two years of high school study. Those students who have satisfied the CSU or UC freshman entrance requirement in a language other than English will have fulfilled this requirement. This requirement may also be satisfied by demonstration of equivalent proficiency prior to transfer.

## INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC)

Summary Outline

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a community college to a campus in either the California State University or University of California system without the need, after transfer, to take additional lowerdivision, general education courses to satisfy campus G.E. requirements.

It should be noted that completion of the IGETC is not a requirement for transfer to CSU or UC, nor is it the only way to fulfill the lower-division, general education requirements of the CSU or UC prior to transfer. Depending on a student's major and field of interest, the student may find it advantageous to take courses fulfilling the CSU's general education requirements or those of the UC campus or college to which the student plans to transfer.

English One course, English composition, 3 sem./4-5 qtr. units;
Communication: this course is a prerequisite to critical thinking
One course, critical thinking-English composition, 3 sem./ 4-5 qtr. units; strong emphasis on writing; prerequisite: English composition

One course, oral communication(a), 3 sem./4-5 qtr. units
Mathematics: One course, mathematics/quantitative reasoning, 3 sem./4-5 qtr. units

Arts and Three courses, at least one course in arts and at least one Humanities: course in humanities, 9 sem./12-15 qtr. units

Social and Three courses in at least two disciplines within this
Behavioral subject area, 9 sem./12-15 qtr. units
Sciences:
Physical and Two courses, one course in each area, and at least one must
Biological include a laboratory, 7-9 sem./9-12 qtr. units
Sciences:
Language Other Proficiency equivalent to two years' high school study(b) Than English:
(a) Students transferring to UC do not have to meet the oral communication requirement.
(b) Students transferring to CSU do not have to meet the proficiency in language other than English requirement.

## GUIDELINES USED BY THE CALIFORNIA STATE UNIVERSITY AND THE UNIVERSITY OF CALIFORNIA IN REVIEW OF PROPOSED 1991-92 IGETC COURSES

In reviewing proposed courses the segments used the specifications stated in the IGETC Curriculum which was sent to the community colleges in November 1990. The following guidelines were used to guide CSU and UC faculty decisions regarding 1991-92 proposed courses for IGETC. These guidelines are consistent with the general education policies developed by the CSU General Education-Breadth Advisory Committee and the UC University Committee on Educational Policy (UCEP) and Board on Admissions and Relations with Schools (BOARS).

Community colleges may find the following guidelines helpful when they begin preparation of course list updates for 1992-93. The guidelines are organized according to subject area. General issues are also listed.

## GENERAL ISSUES:

Minimum unit value - The faculty determined that a course must have a minimum unit value of 3 semester or 4 quarter units in order to meet the requirements of the IGETC. (Laboratory courses intended to accompany lecture courses are an exception to this guideline). It is not acceptable to take three one (I) unit courses to fulfill a 3 unit requirement, because as a rule three one (1) unit courses will not together provide the depth or rigor of a single 3 unit course.

Courses that focus on personal, practical, or applied aspects - Material taught in courses applicable to IGETC should be presented from a theoretical point of view and focus on the core concepts and methods of the discipline. Courses such as Everyday Legal Problems, Psychology of Intimate Relations, or Child Development: Implications for Child Guidance are examples of courses which focus on personal, practical, or applied aspects and do not meet the specifications of the IGETC.

Courses introductory to professional programs - Courses which are introductory to professional programs, such as Introduction to Business, Set Design for Theater, and Writing for Commercial Markets do not have the sufficient breadth to meet general education requirements.

Advanced placement exams - Acceptable scores of 3,4, or 5 can be used to satisfy any of the IGETC subject areas. An acceptable score on an English exam may be used to meet the English composition requirement but may not be used to meet the critical thinking-English composition requirement.

## Independent Study or Topics Courses

Independent study and special topics courses are not acceptable for IGETC. Since content of independent study or special topic courses varies from term to term, the applicability of these courses to IGETC cannot be determined.

## ENGLISH COMMUNICATION

English as a Second Language courses cannot be used to fulfill the English composition requirement. Writing courses designed to meet the needs of a particular major, e.g., Writing for

Accountants, cannot be used to meet the composition requirement.

## MATH/QUANTITATIVE REASONING

Courses approved to fulfill this requirement must focus on quantitative analysis and the ability to use and criticize quantitative arguments. Symbolic Logic, Computer Programming, and survey courses such as Math in Society, were deemed unacceptable to fulfill the math/quantitative reasoning requirement.

## ARTS

The IGETC requires that courses meeting this requirement have as their major emphasis the integration of history, theory, aesthetics, and criticism. Courses which focus on technique or performance were not approved to meet this requirement (e.g., Beginning Drawing, Beginning Painting, and Readers Theater and Oral Interpretation courses focusing primarily on performance).

## HUMANITIES

Acceptable humanities courses are those that encourage students to analyze and appreciate works of philosophical, historical, literary, aesthetic and cultural importance. The faculty of the two segments determined that courses such as English composition, Logic, Speech, Creative Writing, Oral Interpretation, Readers Theater, Spanish for Spanish Speakers, and all elementary foreign language courses were skills or performance courses that do not meet the specifications for IGETC. Advanced foreign language courses were approved if they include literature or cultural aspects. Theater and film courses were approved if they were taught with emphasis on historical, literary, or cultural aspects. The segments will also accept Logic courses if the focus is not solely on technique but includes the role of logic in humanities disciplines.

## SOCIAL AND BEHAVIORAL SCIENCES

Only courses which are taught from the perspective of a social or behavioral science were approved. Consequently, courses such as Physical Geography and Statistics did not meet the IGETC specifications for this area and were not approved. Community colleges may resubmit these courses in a more appropriate area. As noted in the General Issues section, courses with a practical, personal, or applied focus were not approved. Administration of Justice courses may be approved on an individual basis if they focus on core concepts of the social and behavioral sciences.

## BIOLOGICAL SCIENCES

Acceptable courses must focus on teaching the basic concepts of biological sciences. Human Nutrition, Horticulture, Forestry, Health, and Human Environment courses were determined to have a narrow or applied focus and therefore unacceptable for this area. Courses which emphasize the major concepts of the discipline, including biochemical and physiological principles, will be considered.

## PHYSICAL SCIENCES

Courses which do not focus on the core concepts of a physical science discipline, such as Energy and the Way we Live, are not acceptable.

## APPENDIX 5 - ACCREDITATION STANDARDS

[The following is excerpted from "Handbook of Accreditation And Policy Manual" produced by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges, 1990 Edition with 1993-94 Update. The full handbook can be obtained by writing the commission at P.O. Box 70, Aptos, CA 95001, telephone (408) 688-7575, fax (408) 688-1841. Bold added for emphasis.]

## STANDARD TWO: EDUCATIONAL PROGRAMS

Standard Two is broadly applicable to all educational activities offered in the name of the institution, regardless of where, when or how presented, or by whom taught.

## Standard 2A General Provisions

The achievement and maintenance of high quality programs in an environment conducive to study and learning are the primary responsibilities of every accredited institution; hence, the evaluation of educational programs and their continuous improvement is an ongoing responsibility. As it analyzes its goals and discovers how conditions and needs change, the institution continually redefines for itself the elements that will result in programs of high quality.

2A. 1 The institution seeks to meet the diverse educational needs of all its students.
2A. 2 Sufficient resources are provided to meet the educational needs of the students.

2A. 3 The institution demonstrates its commitment to high standards of teaching. Effective procedures and adequate resources exist to evaluate and improve the quality of instruction.

2A. 4 Educational programs are structured to be consistent with institutional purposes, the demographics and economics of the service area, and the student constituency.

2A. 5 Program and course objectives clearly specify the subject matter to be covered, the intellectual skills to be acquired and learning methods used, the affective and creative capabilities to be developed, and the specific occupational skills to be mastered.

2A. 6 Programs and courses are offered in a manner which ensures students the opportunity to complete the entire program as announced, within a reasonable period of time.

2A. 7 The institution has an administrative structure responsible for the overall coordination and administration of instruction.

## Standard 2B Curriculum Planning and Evaluation

Curriculum planning is designed to achieve the aims of the institution. Curriculum planning considers current and future needs for human, financial, and physical resources. This systematic planning is based on continuing institutional self evaluation and assessment of the needs of the institution's constituencies. All appropriate segments of the institution are involved in planning.

2B. 1 The responsibility for design, approval, implementation, and revision of the curriculum is vested in designated bodies with clearly established channels of communication and control. The faculty has a major role in such processes.

2B. 2 The institution engages in periodic review of program and departmental quality and effectiveness under clearly specified and demonstrably implemented procedures. The process is based on current qualitative and quantitative data which are used to assess strengths and weaknesses in achieving program purposes and projected outcomes. (See Standard 1D.)

2B. 3 Policies and procedures for additions and deletions of programs or courses are carefully developed and administered, are based on curriculum planning, and are consistent with the resources of the institution, the capabilities of faculty, and the needs of the community served by the institution.

## Standard 2C General Education

The educational program is designed to give students a substantial and coherent exposure to the major broad domains of higher education. All programs leading to the Associate degree include a major area and a general education component.

2C. 1 The general education segment of all educational programs is based on a philosophy and rationale that are clearly stated and provides the criteria by which the appropriateness of each course in the general education component is evaluated.

2C. 2 The plan for general education is cooperatively developed by faculty and administrative staff and approved by the governing board.

2C. 3 The general education program introduces the content and methodology of the major areas of knowledge -- the humanities, the fine arts, the natural sciences, and the social sciences -- and helps students to develop the intellectual skills and social attitudes that will make them effective learners and citizens.

2C. 4 The educational program provides opportunities for all students to develop and demonstrate competence in communication and quantitative skills, critical analysis of data and argument, and appreciation of cultural diversity.

## Standard 2D Special Programs Offering Courses for Credit

All special courses and programs which include courses for credit whether conducted on- or offcampus are integral parts of the institution; their functions, goals and objectives are consistent with other elements of the institution; they maintain the same academic standards as regular campus programs; and they are planned and evaluated by the same processes as the regular educational program.

The college is solely responsible for the academic and fiscal integrity of all instructional programs and courses which bear the institution's name.

The provisions of Standard 2D apply to:

- Courses taught by non-traditional delivery systems such as television, correspondence, newspaper, video or audio tape, radio, modularized instruction, and computer assisted learning. (See policy, pages 46-47.)
- Contract education courses taught for credit.
- All international education programs. (See policy, pages 52-55.)
- All practices providing credit for prior experiential learning. (See policy, pages 49-50.)
- All credit courses or programs taught under contract by an outside institution. (See policy, pages 57-60.)
- Work experience and cooperative education courses.
- Courses offered through independent study.
- Programs offered on military bases.


## Standard 2E Credit for Student Achievement

Evaluation of student learning or achievement and the award of credit are based upon clearly stated and distinguishable criteria.

## 2E. 1 Student performance is evaluated in terms of defined and published course requirements.

2E. 2 Criteria for evaluating student performance or achievement, i.e., grades (A, B, C, etc.) are clearly established, stated in college publications, and are generally understood by faculty and students.

2E. 3 Credit awarded is consistent with student learning or achievement and based upon generally accepted norms or equivalencies. (See Glossary.)

2E. 4 The degree, certificate, or diploma awarded upon successful completion of an educational program is appropriate to the demonstrated achievement of the graduate.

2E. 5 Clear and well-publicized distinctions are made between courses which offer degree and non-degree credit.

2E. 6 Any credit for prior experiential learning is awarded and limited in accordance with Commission policy. (See Commission policy on "Credit for Prior Experiential Learning in Undergraduate Programs.")

## Standard 2F Articulation

The institution has a systematic procedure for articulating its programs with secondary schools, baccalaureate institutions, and with employers who hire occupational students.

2F. 1 The curriculum planning process involves liaison with secondary schools, particularly in sequence courses. Where articulation agreements exist, high schools of origin receive reports on student performance.

2F. 2 The curriculum planning process involves coordination with baccalaureate institutions, particularly with respect to major and general education requirements. Data about the number, performance, satisfaction, and adequacy of preparation of transfer students are systematically collected and reviewed.

2F. 3 The relevance of courses to job requirements is ensured by a systematic analysis of specific job requirements and curriculum review.

2F. 4 Follow-up studies of transfer and occupational students are conducted regularly to evaluate the level of performance or job placement.

## Standard 2G Non-Credit Courses and Programs

Non-credit courses and programs, whether offered on- or off-campus, are integral to the educational mission of the institution.

2G. 1 Planning for and evaluation of non-credit courses and programs is comparable to planning and evaluation for other programs of the institution.

2G. 2 Programs are administered under stated and well publicized institutional policies and procedures.

2G. 3 Policies governing non-credit courses and programs are described in appropriate institutional publications.

2G. 4 There is demonstrable coordination with institutional credit programs.

## Standard 2H Community Education and Services

Community Education and Services, if recognized as an institutional objective, respond to local needs for lifelong learning by providing avocational classes, classes for the business and professional community, non-credit contract education courses, cultural events, and community and civic functions.

2H. 1 Community education classes are part of the educational program and are coordinated with the credit and program.

2H. 2 Community liaison is effectively developed and maintained in order to determine community interests and needs and to evaluate offerings.

2H. 3 Institutional policies and procedures establish conditions under which college facilities may be used by the public.

## Supporting Documentation for Standard Two

1. Description of curriculum-development bodies and recent minutes.
2. Self study and evaluation reports from external reviews and the most recent professional and institutional accreditation visits and documentation of resulting actions.

## 3. Course outlines and objectives for all programs.

4. Written philosophy and rationale for the general education program.
5. Articulation agreements.
6. Follow up studies on transfer and vocational students.
7. Program advisory committee rosters and recent minutes.
8. Summary listing of off-campus programs, directors, sites, and enrollments.
9. Catalogs, brochures, announcements, and class schedules for special programs and Community Education programs.
10. Policies regarding the award of credit based on prior experiential learning, including a report on the amount of such credit awarded for the past two years.
11. A copy of each Memorandum of Understanding for programs offered on military bases or for military agencies.
12. Copies of brochures and announcements and any contractual agreements with other institutions or travel agencies for study abroad or study-travel programs.
13. Contracts with other organizations that provide instruction for the college.

## APPENDIX 6-CURRICULUM RESOURCE CONTACT PERSONS

California Community Colleges
Nancy Glock, Curriculum Specialist
CCC Chancellor's Office
1107 9th Street, 9th Floor
Sacramento, CA 95814
(916) 322-6888
(916) 445-2946 FAX

Kathleen Nelson, Articulation \& Transfer
CCC Chancellor's Office
1107 9th Street, 2nd Floor
Sacramento, CA 95814
(916) 322-5617

California State University
CSU GE-Breadth Course Review
Jolayne Service, Interim Director
Academic Affairs, Plans and Programs
Office of the Chancellor
The California State University
400 Golden Shore, Suite 312
Long Beach, CA 90802-4275
(310) 985-2845
(310) 985-2032 FAX

CSU IGETC Course Review
Vivian Franco, Associate Dean
Academic Affairs, Educational Support
Office of the Chancellor
The California State University
400 Golden Shore
Long Beach, CA 90802-4275
(310) 985-2937
(310) 985-2874 FAX

Staff Contact CSU Academic Senate
Deborah Hennessy, Academic Senate 400 Golden Shore, Suite 134
Long Beach CA 90802-4275
(310) 985-2616

University of California, Board of
Admissions and Relations with Schools
Robert J. Blattner
University of California, Los Angeles
Department of Mathematics
6364 Math Sciences Building
Los Angeles, CA 90024-1555
(310) 825-3233, 4701 (messages)
(310) 206-6673 FAX

Articulation/IGETC Review
Louise Randolph
Articulation Analyst
UC Office of the President
300 Lakeside Drive, 17th Floor
Oakland, CA 94612-3550
(510) 987-9569

Admissions
Carla Ferri
Director of Undergraduate Admissions
UC Office of the President
300 Lakeside Drive, 17th Floor
Oakland, CA 94612-3550
(510) 987-9596

Academic Senate for California
Community Colleges
Bill Scroggins
Chair, Curriculum Committee
Chabot College
25555 Hesperian Blvd.
Hayward, CA 94545
(510) 786-6893 (office)
(408) 255-2957 (fax)
bill.scroggins@ccc-infonet.edu (e-mail)

# APPENDIX 7 - EXAMPLE COURSE OUTLINES OF RECORD 

Chabot College

November,

Course Outline for Art 2A

## INTRODUCTION TO DRAWING

## Catalog Description:

2A - Introduction to Drawing
3 units
Creation of authentic drawings utilizing pencil, charcoal, conte, and/or ink. Compositional analysis of student and master drawings through diagrams, tracings, verbal and written descriptions and critiques. Awareness of the creative process as it applies to the student and other artists. Impact of art works on the viewer in different contexts, such as: visual, historical, social, and cultural. 2 hours lecture, 4 hours studio.

## Expected Outcomes for Students

Upon completion of the course students should be able to:

1. replace stereotypical drawings with authentic drawings which come from the student's integration of their emotions, spirit, and intellect with appropriate techniques and materials;
2. visualize, observe, and coordinate the hand with the eye, in order to create drawings with a variety of flat as well as three-dimensional shapes utilizing lines, values, textures, and various spatial devices;
3. analyze masters' and students' drawings by recognizing unity with a focal point or multiplicity through the use of balance, rhythm, and proportion;
4. use their awareness of the creative process, take a focus, and plan steps for solving a problem;
5. use their materials (charcoal, conte crayon, pencils, and/or ink) to express themselves in a variety of ways from formal to spontaneous;
6. compare and contrast the works of other artists as well as their own in historical, social, and cultural contexts with particular attention paid to the expression of ideas in the artistic medium.

## Course Content

1. Methods used in facilitating authentic drawing and taking a focus including:
a. use of mirrors
b. drawing with the non-dominant hand
c. using blind contour drawing
d. drawing with an eraser on charcoal to create open color without the use of outlines
2. Perspective drawings (from imagination before direct observation)
a. learning the principles of one- and two-point perspective before applying them in real-life situations
b. introduction to proportion: estimating horizontal, vertical, and diagonal lines with the framed grid method
c. other spatial devices: overlapping shapes, atmospheric perspective, diminishing sizes, location on the picture plane, and frontal dominance
3. Drawing light and shadow
a. relation to perspective: dependence on light traveling in a straight line
b. achieving direction of light source falling on objects: correctly placed core shadow, highlight, light area, reflected lights, and cast shadow
c. expressing curved and flat planes clearly
d. creating a value scale to control the medium
4. Compositional analysis of master paintings and student creations
a. tracing color reproductions of masters' works to discover:
1) how the composition is unified by balance, rhythm, and proportion
2) how the artist achieved variety with a center of interest
3) how the composition carries interest to all four quadrants
b. similar analysis of the student's own creations
c. writing critiques of master and student works
d. analyzing the written critiques of others: group work
e. follow-up tracings to isolate various aspects of a composition discovered through the critique: axis lines, value patterns, small/medium/large positive and negative shapes
5. Contextual analysis of master paintings and student creations
a. comparing and contrasting art works on the same subject: how visual elements, unifiers, and media combine to express subject and emotion
b. themes explored may include:
1) historical: realism, expressionism, idealism, naturalism
2) cultural: eastern and western: uses of flat space, etc.
3) social: renaissance religious art
6. The creative process
a. inspiration based on individual awareness
b. research to "saturation"
c. reflection until inspiration unifies with approach
d. experimentation in the creative form
e. evaluation using analytical skills
f. methods of studying the creative process:
1) analyzing similarities and differences leading up to a larger, more finished composition
2) analyzing drawings done by a master artist before the final art work
7. Applying the creative process to develop a finished project
a. using paper space fully
b. balance
c. center of interest with secondary centers of interest
d. positive shapes touching 3 or 4 sides of the format edge
e. small/medium/large positive and negative shapes
f. foreground, middle ground, and background
g. light and shadow with a light source
h. variety of techniques in handling media: strong, sure contact of materials with the drawing surface, drawing on different kinds and values of paper for different reasons and kinds of impact, attractive presentation that focuses attention on the art work
8. Analysis of student projects
a. written self-critique using the methods of analysis developed earlier: similarities of compositional devices, techniques, balancing devices, value range, etc.
b. recognition of the student's own style: comparing and contrasting student's own work to those of master and contemporary artists
c. incorporation of written critique of classmates and the instructor: using their own unique sensibilities and style as a basis upon which to evaluate the feedback of others

## Methods of Presentation

1. Classroom lecture and demonstration of analytical and drawing techniques.
2. Exhibition of works by previous students, or similar works by fine artists, working with the problem at hand.
3. In-class student drawing activities illustrating composition, value, texture, line, shape, perspective, and presentation.
4. Current exhibitions, gallery shows, speakers, and films relevant to the projects are viewed and discussed in class.
5. Presentation and analysis of masters' and contemporary drawings chosen from a variety of centuries and countries, particularly Eastern, Western, African, and Indian, accompanied by presentation of music, literature, and drama to place the artist's works in context.
6. In-class critiques, done individually and in groups, of masters', contemporary, and student drawings.

## Assignments and Methods of Evaluation

1. Class participation in criticism based on instructor observation of the extent to which students apply the techniques of analysis.
2. Development of a portfolio of drawings which reflect the goals of each activity: tracings of existing works, line drawings, drawing by quads, charcoal with eraser shading, etc.
3. Written essays comparing and contrasting thematic and contextual elements including historical, cultural, and social.
4. Objective exams on the terminology and techniques of analysis and the creative process.

## Textbook(s)

Assigned readings from the following documentary books:

1. Da Vinci, Leonardo, Notebooks
2. Da Vinci, Leonardo, Painting
3. Delacroix, Eugene, The Journal of Eugene Delacroix, 1972
4. Gauguin, Paul, The Intimate Journal
5. Klee, Paul, The Nature of Nature
6. Klee, Paul, Notebooks
7. Klee, Paul, Pedagogical Sketchbooks
8. Klee, Paul, The Thinking Eye
9. Shahn, Ben, The Shape of Content, 1957
10. Van Gogh, Vincent, Letters To My Brother, Theo

Assigned readings from the following books on art methods, techniques, and lessons:

1. Arnheim, Rudolf, Art and Visual Perception, 1966
2. Collier, Graham, Form, Space, and Vision
3. Doblin, Jay, Perspective: A New System for Designers, 1956
4. Edwards, Betty, Drawing on the Right Side of the Brain, 1989
5. Ehrenzweig, Anton, Weidenfeld, and Nicolson, The Hidden Order of Art, 1967
6. Gregory, R. L., Eye and Brain: The Psychology of Seeing, 1966
7. Houlberg, Barbara, The Craft of Teaching Drawing, 1973
8. Itten, Johannes, Design and Form
9. Klee, Felix, Diaries of Paul Klee, 1898-1918
10. McKim, Robert H., Experiences in Visual Thinking
11. Nicolaides, Kimon, The Natural Way to Draw
12. Stone, Irving, Dear Theo; The Autobiography of Vincent Van Gogh, 1967
13. Strunk, William, Jr., The Elements of Style, 1959
14. Watrous, James, The Craft of Old-Master Drawings, 1957

## Special Student Materials

A required list of drawing supplies to complete all of the assigned studies is posted each term in the bookstore.

