2022 EDC Handbook

The Purpose

The Educational Design Committee serves as a standing committee of the Curriculum and Instruction Council. The mission of the Educational Design Committee is to facilitate consistency in the quality of curriculum management and to ensure that all courses and programs meet the intent of Title 5 regulations.

https://www.mtsac.edu/governance/committees/eddesign/

MT. SAC
Mt. San Antonio College

EDUCATIONAL DESIGN COMMITTEE
(Academic Senate Committee – Reports to Curriculum and Instruction Council)

Purpose

The Educational Design Committee serves as a standing committee of the Curriculum and Instruction Council. The mission of the Educational Design Committee is to facilitate consistency in the quality of curriculum management and to ensure that all courses and programs meet the intent of Title 5 regulations.

Function

1. Report to the Academic Senate and make recommendations to the Senate Board of Trustees via Curriculum and Instruction to include:
   a. Review of new and amended credit and noncredit course content and associated required technical information under Title 5.
   b. Review of new and amended credit and noncredit programs and the associated required technical information under Title 5.
   c. Review of new and amended courses as they relate to majors and certificates, degrees, and transfer.
   d. Coordination of course proposals and review, as appropriate.
   e. Review appropriate requisites.
   f. Review Distance Learning amendment forms.
2. Review courses and programs, maintaining compliance with external and internal policies.
3. Recommend policy changes pertaining to curricular issues.
4. Implement State regulations and guidelines pertaining to the curriculum development process:
   a. Train committee members, faculty, division deans, and staff, as appropriate.
   b. Maintain and provide regulations updates.
   c. Disseminate information.
5. Review and make recommendations regarding transfer status and general education courses via Educational Design Subcommittee for General Education and Transfer Issues.
   a. Educate and train faculty on procedures in requesting general education course approval.
   b. Implement the general education philosophy on campus by systematically reviewing all general education lists.
6. One committee member from each division will communicate with the Division and Department Chairs as needed on curriculum and related matters that are being reviewed.

This committee will have a faculty Chair or Co-Chair

	Position Represented	Name	Term
1.	Curriculum Liaison (Co-Chair)	Malcolm Rickard	2022-24
2.	Associate Vice President, Instruction (Co-Chair) or Designee	Sylvia Ruano or Meghan Chen	ongoing
3.	Provost, School of Continuing Education or Designee	Tami Pearson	Ongoing
4.	Assistant Curriculum Liaison	Dianne Rowley	2022-23
5.	Articulation Officer	Jamaika Fowler	ongoing
6.	Faculty representing Arts (appointed by the Academic Senate)	Melissa Macias	2021-24
7.		Robert Bowen /Bruce Rogers	2021-24
8.	Faculty representing Humanities (appointed by the Academic Senate)	Jennifer Olds	2022-23
9.		Barbara Mezaki	2021-24
10.	Faculty representing Natural Sciences (appointed by the Academic Senate)	**Vacant**	**2021-24**
11.		Sarah Nichols	2021-24
12.	Faculty representing Kinesiology (appointed by the Academic Senate)	Karol Ritz	2019-22
13.		Lani Ruh	2021-24
14.	Faculty representing Business (appointed by the Academic Senate)	Cecelia Thay	2021-24
15.		Shelley Doonan	2021-24
16.	Faculty representing LLR (appointed by the Academic Senate)	Jared Burton	2019-22
17.		Kolap Samel	2021-24
18.	Faculty representing Tech & Health (appointed by the Academic Senate)	Garett Staley	2020-23
19.		Vacant	2019-22
20.	Faculty representing Student Services (appointed by the Academic Senate)	Carolyn Lake-Bain	2021-24
21.		**Vacant**	**2021-24**
22.	Faculty representing Noncredit (appointed by the Academic Senate)	Donna Necke/ L.E. Foisia	2021-24
23.		Dana Miho/ Vanessa Garcia	2020-23
24.	Student (appointed by the Associated Students)	**Vacant**	**2021-22**

Membership Meeting Times:

COMMITTEE TYPE	CO-CHAIRS	MEETING SCHEDULE	LOCATION	TIME
Academic Senate	Malcolm Rickard/ Sylvia Ruano	Fall Semester: Every Tuesday Spring Semester: Every Tuesdays	Via Zoom	1:30-3:00 p.m.

Person Responsible to Maintain Committee Website: Lisa Jackson
ljackson35@mtsac.edu,
4655

College Website Link and Last Time Website Was Updated:
http://www.mtsac.edu/governance/committees/eddesign/

2022-2023

Purple Stylesheet

Course ID		
Course Element		Guidelines
Purpose and Function of Style Sheet		The following guidelines highlight capitalization, punctuation, format, and writing styles recommended for Mt. SAC Course Outlines of Record. Consistent use of the guidelines should assist in the writing and evaluation of CORs. The guidelines highlight local practice and complement, but do not replace, the officially adopted references, *The Course Outline of Record: A Curriculum Reference Guide **2017*** COR_0.pdf (asccc.org) by the Academic Senate for California Colleges Curriculum Committee and the *Program and Course Approval Handbook **(7th Ed.) 2019*** by the Chancellor's Office.
Integration Statement	☐	A course outline of record needs to be integrated. At the most fundamental level "integration" occurs when each element of the course outline of record reinforces the purpose of the other elements in the course outline. There should be an obvious relationship between the objectives of the course, the methods of instruction, assignments, and methods of evaluation used to promote and evaluate student mastery of those objectives.[1]
Equity Statement	☐	Elements of the course outline of record should include culturally responsive and equity-minded language that reflects freedom from bias or assumptions that negatively impact students. Examples: **Course Title**: Pre-Columbian Art (Euro-centric descriptor) vs. Latin American Art and Architecture (equity-centered descriptor) **Measurable Objective**: Identify the contributions of the minority cultures which have brought a depth of expression to American Society (Euro-centric objective) vs. Examine and discuss the art and architecture of Latin America during the Colonial Era, Post-Independence, and in relation to Major Revolutions (Mexico, Cuba, Nicaragua) (Equity-centered objective). **Lecture Topic**: Post-Classic Culture: Toltecs, Mixtecs, and Aztecs (Euro-centric topic) vs. Toltecs, Mixtecs, and Aztecs (Equity-centered topic)

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[1] Academic Senate for California Community Colleges Curriculum Committee 2007-2008. *The Course Outline of Record: A Curriculum Reference Guide* (2013), 5.

Course ID		
Course Element		Guidelines
		Methods of Evaluation: 5- to 7-page research paper on Pre-classic Olmec Culture (Euro-centric) vs. Group presentations on contemporary Latin American artists (Equity-centered) **Sample Assignment**: In the Pre-Columbian period, Mesoamericans devoted art to the main areas of their lives. Write a 5- to 7-page research paper comparing illustrations from two of the following: Aztec stone calendars, Mayan Bonampak Wall Paintings, the Olmec La Venta architectural center, or the Aztec Avenue of the Dead (Euro-centric) vs. Prepare a group presentation on how embattled colonized Latin American civilizations used art, such as the myth of Quetzalcoatl, to represent potent symbols of survival during a period of invasion by foreign oppressors (Equity-centered).
General Considerations		**Capitalization**
	☐	**Use consistent capitalization**
	☐	**Capitalize only proper nouns**
		Punctuation
	☐	**Avoid using the slash (/) as it does not clearly express intended meaning**
	☐	**Avoid using the ampersand (&) unless part of a proper noun**
		Format and Writing Style
	☐	**Abbreviations and acronyms are spelled out the first time the term is used and then the abbreviation is placed in parentheses immediately after. The abbreviation can be used thereafter.** 　　**Examples:** 　　　　**Educational Design Committee (EDC)** 　　　　**Curriculum and Instruction Council (C&I)** 　　　　**Course Outline of Record (COR)**
	☐	**Use parallelism** 　　**Examples:** 　　　　**Using, browsing, and viewing** 　　　　**OR**

Course ID		
Course Element		Guidelines
		Use, browse, and view
		Obtaining, applying, converting **OR** **Obtain, apply, convert**
		Drawing, finding, and determining **OR** **Draw, find, and determine**

	☐	**In many cases the word "the" may be omitted unless grammatically necessary**
		    Examples:
		      - ~~The~~ Role of nutrition in disease prevention
		      - ~~The~~ Classic French School
		      - ~~The common~~ Tools and file types of digital photography

Catalog Description		**Format and Writing Style**

	☒	**Omit introductory words and start with primary topic when appropriate**
		    Examples:
		      ~~Cover~~ Network vulnerabilities from a hacker's perspective.
		      Basics of commercial HVAC control theory as it applies to electric, pneumatic, and digital control systems.
		      Dramatic literature and the development of dramatic art.
		 Include course requirements
		    Examples:
		      Field trips are required.
		      TB test is required.

Schedule Description		**Format and Writing Style**
	☐	**Do not introduce topics not mentioned in catalog description**

Course ID		
Course Element		Guidelines
	☒	**First sentence of catalog description is <u>recommended</u>**
	☐	**Limited to 130 characters**

	☐	**Include course requirements**
		    Examples:
		        Field trips are required.
		        TB test is required.
		        Concurrent enrollment in a learning community is required.

Lecture Topical Outline		**Capitalization**
	☐	**Use sentence capitalization**
		Punctuation
	☐	**Enter one topic per field. <u>Do not</u> number it or begin with a dash. Do not add periods unless** **Example:** Recognize and explain the dynamics (development and change) of ethnic groups that comprise American society and culture by critically reviewing how struggle, resistance, racial and social justice, solidarity, and liberation, as experienced and enacted by Native Americans, African Americans, Asian Americans and/or Latina and Latino Americans are relevant to current and structural issues such as communal, national, international, and transnational politics as, for example, in immigration, reparations, settler-colonialism, multiculturalism, and language policies. Identify major themes and concerns found in multicultural literature by critically analyzing the intersection of race and racism as they relate to class, gender, sexuality, religion, national origin, immigration status, ability, tribal citizenship, sovereignty, and language Apply aspects of critical analysis of texts and genres (poetry, film, song, novel, etc.) in democratic, cross-cultural discussion that includes the application of theory and knowledge produced by Native American, African American, Asian American, and/or Latina and Latino American communities to describe the critical events, histories, cultures, intellectual traditions, contributions, lived-experiences, and social struggles of those groups with a particular emphasis on agency and group affirmation

Course ID		
Course Element		Guidelines
	☐	No punctuation at end of topic <u>unless in sentence format</u>
		Format and Writing Style

	☐	Omit references to the following as they are not topical
		    Syllabus
		    Course orientation
		    Introduction or Introduction to
		    Review of
		    Introduction and overview
		    Fundamentals

	☐	List topics only once
	☐	List distinct topics on separate lines
	☐	Omit midterm
		Include final exam (final exam *must* be listed in both lecture and lab topics when there is lab parity)
	☐	Omit teaching activities
Lab Topical Outline (Refer to Topical Outline) (Exceptions are listed)		**Format and Writing Style**

	☐	Topics should indicate instructional activity
		The use of gerunds ("ing" verbs), if appropriate, convey activity
		Do not use periods unless in sentence format
		    Examples:
		    • Adjusting metering devices
		    • Assembling, editing, and rendering all animated scenes for final output of animated story
		    • Acquiring digital images with digital cameras and flat-bed scanners and transfering them to the network lab server file storage areas

Course Measurable Objectives		**Punctuation**
	☐	Do not number measurable objectives
	☐	End measurable objectives with periods

Course ID		
Course Element		Guidelines
		Format and Writing Style
	☐	**Begin objectives with primary verb** **Omit** 　**"The student will:"** 　**"Demonstrate the ability to"** 　**"Demonstrate an understanding"** 　**"Upon completion of the course, the student will be able to"** *If authors use "Demonstrate" or "Discuss" EDC will expect to see a problem solving demonstration in category 2. EDC recommends not using "Demonstrate" or "Discuss" as they can be difficult to measure. Laboratory courses may use the word "demonstrate."*
	☐	**Do not use the following verbs to construct measurable objectives. These behavioral terms are difficult to measure.** 　**Know** 　**Understand** 　**Comprehend**
	☐	**Use plural form when appropriate** 　**Examples:** 　　1. **Create and integrate appropriate tables, charts, or diagrams Word documents.** 　　2. **Classify disinfectants by category and explain their modes of action.** 　　3. **Demonstrate procedures to charge and recover refrigerant from operational refrigeration systems.** 　　4. **Classify types of electromagnetic radiation.**
	☐	**Order objectives, if appropriate, by cognitive level. The use of a taxonomy of learning, such as Bloom's Taxonomy, is recommended for consistency of language and rigor.** 　**Knowledge** 　**Comprehension**

Course ID		
Course Element		Guidelines
		Application **Analysis** **Synthesis** **Evaluation**
Methods of Evaluation		**Punctuation**
	☐	**Do not use periods unless in sentence format**
		Format and Writing Style
	☒	State methods of evaluation as nouns which complete the statement "The student will be evaluated by \<noun\> **Examples:** **Season-long journal analyzing daily workout** **Critical essays of 3-4 pages based on play-script evaluations or play performances from an historical perspective** **Evaluative reflection of a student's role within a group**
	☐	**Do not use statements from obsolete checklist unless expanded with additional details that link the phrase to the measurable objectives. Methods of Evaluation need to reference Measurable Objectives.** **Omit:** **Exams(s)** **Quizz(es)** **Class Performances(s)** **Performance Exam(s)** **Homework Problem(s)** **Laboratory Report(s)** **Assignments**
	☐	*Make sure that all of the measurable objectives are evaluated*
	☐	**If Categories 2 and 3 are not appropriate use the phrase "Not Applicable"**

Course ID		
Course Element		Guidelines
Methods of Evaluation Category 1	☒	**Format and Writing Style** **Category 1. Substantial written assignments** **Include approximate length, type, and number of written assignments** **Examples:** **A semester-long investment research project including financial data research of a corporation, a 5-10 page written report summarizing data with the use of charts and graphs** **Three critical essays of 3-4 pages examining financial topics such as retirement planning** **Five-page reaction paper concerning the student's experience at an unfamiliar religious institution** **Rationale** **If written assignments are not appropriate write a one sentence rationale specific to the course** **Examples:** *This class is primarily a skills based course which relies on skills demonstration, class performance, and visual and descriptive identification of plants.* *This class is primarily a skills based course* **related to using the Windows environment, managing files, and using Internet Explorer.** **This class evaluates students on problem solving exercises that prepare students to take veterinary technician examinations.** *This class is primarily a skills based course* **related to refrigeration systems.** **Students are evaluated on computations, analysis, and recommendations using data related to economic situations.**
Methods of Evaluation Category 2	☐	**Format and Writing Style** **Category 2. Computational or non-computational problem solving demonstrations** **Examples:** **Calculations of interior materials** **Quarantine procedures for given symptom sets** **Construction of a refrigeration system** **Character animations and movements**

Course ID		
Course Element		Guidelines
		Computations of economic data, data graphs, and explanations of economic data and supporting concepts
Methods of Evaluation Category 3	☐	**Format and Writing Style**
		Category 3. Skills demonstrations **Reflects tasks students will perform** **Specific to skills learned in the course** **Examples:** **Putting skills** **Handling of refrigerants** **Group demonstration of two developmentally appropriate children's activities**
Methods of Evaluation Category 4	☐	**Format and Writing Style**
		Category 4. Objective Examinations **Should connect to a measurable objective** **Examples:** **Multiple choice questions using technical vocabulary** **Short answer questions on rules and regulations of soccer** **Short answer questions that refer to positioning with specific serve situations and score** **Example:** **CHEM 80: Free response, multiple-choice, completion, matching items, or true or false exams and quizzes that assess nomenclature, properties, structures, reactions, mechanisms, syntheses, and spectroscopic analyses of organic compounds (alkanes, alkenes, alkynes, alkyl halides, alcohols, and phenols)**
Sample Assignments	☐	**Format and Writing Style**
		Include expectations such as number of pages **Include how an assignment is submitted** Examples:

Course ID		
Course Element		Guidelines
		1. Write a one-page paper explaining driving directions from student's house to Mt. SAC including articles of place and direction. 2. Using real and nominal GDP and inflation rates compare the given examples using the calculated index numbers. 3. Create an iPhoto album using at least 15 imported images and create a slide show based on the images. Add music and synchronize the timing.
Textbook	☐	Course textbooks support Title 5 reading expectations. Representative textbooks should be no older than five years. The CSUs and UCs require newer textbooks and may deny articulation based on older texts. For transferrable courses, at least one textbook with a recent publication date should be listed. Open Educational Resources (OER): Texts do not need to be published in hard copy. The UC and CSU welcome the use of online texts and other Open Educational Resources (OER), so long as the resource is a stable, bona fide textbook, and not just a collection of links to lecture notes or other web pages (Articulation, Curriculum, and Open Educational Resources - ASCCC Open Educational Resources Initiative (asccc-oeri.org). It is recommended to keep at least one traditional textbook (commonly accepted in the field) on the course outline of record as OER's become more stable and widely used. *To use an OER textbook resource as a bibliographic reference at minimum the textbook reference should include:* 1. Author: e.g., OpenStax 2. Name : e.g., Biology 3. Publisher: e.g., OpenStax CNX 4. Publication Date 5. Link/course ID 6. Licensed by/under *Refer to the following the example:*

Course ID		
Course Element		Guidelines
		OpenStax, Biology. OpenStax CNX. Oct 21, 2016 http://cnx.org/contents/185cbf87-c72e-48f5-b51e-f14f21b5eabd@10.61. Licensed under a Creative Commons Attribution 4.0. *Notes:* • CSU's and UC's need the publication date *and* revision date if appropriate. • Additional information that can be added if accessible includes, "Copyright holder." Add to the end of the reference.
For all the elements above cutting and pasting is more than just allowed, it is encouraged. However, so that hidden, unwanted HTML codes are not along for the ride, cut and past the *text only*. This can be done by using keyboard shortcuts Ctrl+Shift+V on a PC or Command+Option+Shift+V on a Mac.		

		Other considerations for course and program submission
Coversheet	☒	*Course authors are requested to list major changes and the purpose for the changes to course modifications.* *The rationale should include if new articulation or new GE request is accompanying the modification for an existing course* *Stand-alone courses (course not tied to a specific degree or certificate) are subject to review by Curriculum and Instruction Council* *Distance Learning Amendment Form* *List changes made to course/program*
Overlap	☒	Overlap questions must be answered for all courses. Please use the college catalog and WebCMS to review new and existing courses. A courtesy email is recommended to affected departments.
SAM Codes	☒	General Education courses are typically marked E. D may be chosen. CTE courses should be marked B, C, or D. If the course is labeled SAM Code B, the course is required to have a SAM Code C level prerequisite.
Department Minutes	☒	Electronic copies of department minutes are required to document approval of the course or program changes. Please highlight the section where approval occurred. These minutes should be uploaded into WebCMS .
Advisory Minutes	☒	Electronic copies of advisory minutes are required to document approval of the CTE course or program changes. Please highlight the section where approval occurred. These minutes should be uploaded into WebCMS.
Content Review Forms	☒	Requisites outside the discipline require documented collegial consultation in accordance with the Academic Senate's Content Review Implementation Plan. Evidence of analysis is required.
Articulation Matrix	☒	New courses should be clearly lower division. If only one course (or if no course) is found at the lower division level, the baccalaureate status form is required. Courses that cannot document lower division status are subject to review by Curriculum and Instruction Council.
Work Experience	☒	Work Experience courses should be assigned a SAM Code C.

		Tops code must match the occupational program for which the Work experience is designed Prerequisite: Approval of college Work Experience supervisor and compliance with Work Experience regulations as designated in the College Catalog. Recommended description: This course is designed to combine actual job experience in CTE Field X with related classroom instruction. This work experience may be during a regular semester or during a summer session. A minimum of 75 paid clock hours or 60 non-paid clock hours per semester is required for each one unit of credit. It is recommended that the hours per week are equally distributed throughout the semester. Instructor approval required.
Independent Study/Special Projects	☒	Recommended description: Offers selected students recognition for their academic interest in discipline X and the opportunity to explore the discipline of X in greater depth. The content of the course and the methods of study vary from semester to semester and depend on the particular project under consideration. These courses are numbered "99."
Honors	☒	Topics and MOs should match the non-honors course. Faculty may add additional MOs to the honors course. Methods of evaluation and sample assignments should reflect the enrichment of the honors course. Descriptions must include: An honors course designed to provide an enriched experience. Students may not receive credit for both Course X and Course XH.

SUBMISSION DATES

New courses and modifications to courses are due by 31 May.

New degrees and certificates and modifications to degrees and certificates are due by May 31.

Degrees and certificates will not be reviewed by EDC if they include courses that are 6 or more years old (for T5 compliance).

 5-year review of courses are due by 31 May.

Modifications include changes to:

Course ID	Prerequisites, corequisites, and advisories	Basic Skills Status
Course Title	Certificate, degrees, and majors	Basic Skills Course Level
Catalog Description	General Education (GE) Requirements and GE status	Credit status (degree Applicable or Non- degree applicable)
Units and hours	Articulation	
Repeatability	Instructional Type (Lecture, Lab, Lecture and Lab Combination, or Activity)	
SAM Code changes	*Top Codes*	

WEBCMS STAGE INFORMATION

Website: http://webcms.mtsac.edu/webcms/

Stage 1: Course Author

Stage 2: Department Chair review, upload department and advisory minutes

Stage 3: Division Dean/Associate Dean review

Stage 4: Curriculm Office: Pending Prescreening – results in course being forwarded to the EDC agenda or returned to Stage 1 for revisions by the course author

Stage 5: Prescreening Comments to Author

Stage 6: Curriculum Office: Prescreening Responses from Author

Stage 7: Review for EDC Agenda

Stage 8: EDC Agenda (Checks and Balances) - results in approval, approval with minor edits, pending (course will be returned to EDC consent agenda), or HOLD (requires a second EDC review or C&I referral)

Stage 9: EDC Comments to Author

Stage 10: Curriculum Office: Post EDC Responses from Author

Stage 11: C&I Agenda

Stage 12: Mt. SAC Board Agenda

Stage 13: Sent to Chancellor's Office

Stage 14: Approved for Catalog

CURRICULUM CONTACTS

Malcolm Rickard, Curriculum Liaison: mrickard@mtsac.edu

Dianne Rowley, Assistant Curriculum Liaison: drowley@mtsac.edu

Jamaika Fowler, Articulation Officer: jfowler@mtsac.edu

Irene Inouye, Curriculum Specialist: ipinedo3@mtsac.edu

Sylvia Ruano, Dean of Instructional Services: sruano5@mtsac.edu

GENERAL CHECK POINTS FOR REVIEWING CURRICULUM

1. If a change is requested for the Course ID, it is necessary to submit a cover memo explaining rationale for the change. This kind of change can take a significantly longer time to approve than a regular course amendment.
    *   Remember that if the course appears in certificates or degrees, a program change needs to be submitted to change the certificate or degree requirements.

2. For a new course proposal or any recommended change in class size, make sure the appropriate form to petition for class size is completed accurately and sent with the course proposal. (This form is included on WebCMS, so when faculty are inputting their courses, they can/should take care of this.) Incomplete forms will be returned by the Class Size Committee.

3. For courses proposed for lab-lecture parity, make sure the petition form is completed (completed completely) and that it includes all necessary attachments (like the sample syllabus required). The committee can't approve a course for teaching lab status unless the documentation is available for committee review that demonstrates a valid basis for establishing parity. (The form is NOT available as a supplemental form on WebCMS at this time.)

4. Make sure the SAM code is correct. Only the last 3 or 4 courses in a voc ed certificate should be labeled "Advanced Occupational."

5. For establishing course prerequisites or co-requisites or for changing them, course need Content Review forms attached with the submission of a course. For any course amendment with a prerequisite that was validated previously, a content review form needs to be included that officially provides the rationale for its establishment.

6. Review the Course Descriptions (long and short versions). The short version should essentially mirror the long version (communicate the same emphasis for the course). Generally one sentence from the long course description can be used appropriately for the Course Schedule Description. On WebCMS, the short (or Class Schedule Description) is limited to 130 spaces (including punctuation, characters, and spaces).

7. For the course outline:
    *   Remember to eliminate "week" before each topic.
    *   Topics need to be separated by a dash at the beginning of the line.
    *   Avoid listing exams or quizzes as a topic, but identify a final exam for the last entry.
    *   If the Course Description or Title of the Course has changed, ED will look for a corresponding change in the course outline (i.e., any indication that the course itself has changed to trigger a title and/or description change)

8. For the course laboratory outline:
    *   Make sure to include a lab outline for lab courses (including teaching labs)
    *   Avoid using the same entries in the course outline and the lab outline; the lab outline should reflect activities corresponding to the lecture portion of the course.
    *   Avoid listing a final examination as one of the lab outline topics unless it is a stand alone lab course.
    *   Remember to eliminate "week" before each topic.
    *   Topics need to be separated by a dash at the beginning of the line.

9. For sample assignments, follow the "Guidelines for Writing Sample Assignments,." These guidelines can be used as a checklist for reviewing courses. Getting sample assignments correct greatly speeds time needed for course review and seems also to greatly reduce the probability that the course will be held up for changes before the approval process can be completed.

10. For <u>Course Measurable Objectives</u>, the course should have 5 to 10 objectives.
   - The measurable objectives should be general statements of what the students can do at the end of the course or skills they can demonstrate and the instructor can measure.
   - Each objective should be stated in a statement beginning with an active verb.
   - At least some of the measurable objectives require higher level thinking skills (analyze, evaluate, synthesize, etc.).
   - Review Measurable Objectives to make sure they are aligned with topical outlines and methods of evaluation. Especially for amended courses, it is easy to pass over components of the course that aren't being changed. However, the course as a whole must demonstrate coordination between topics taught, methods of evaluation, and measurable objectives.
   - Avoid vague objectives that cannot be measured (e.g., Know, understand, demonstrate ability, etc.).

11. Make sure the <u>Methods of Evaluation</u> section is filled out.   Occasionally this part seems to get lost in the review process.
   - WebCMS includes space for brief descriptions instead of a simple listing of assignment terms that we have used for many years (e.g., term or other paper, written homework, etc.). Title V regulations require that methods of evaluation be included by describing <u>types</u> of class assignments falling under the various categories in this section of the course outline. Examples of expanded methods of evaluation are provided on a separate handout.
   - Entries in this section are differentiated from "Sample Assignments" in that Sample Assignments should very specifically be individual assignments that might be given to students rather than a type of assignment.

12. <u>General</u>

   - Review spelling and grammatical correctness. Web CMS allows for spell checking, but it has to be prompted. Making simple corrections in our office for all courses when the errors are identified in committee review increases Marge's workload significantly. We'd like to remind faculty, departments, and division offices to check for correctness and make the changes before the courses come to ED.

   - If it is imperative that a course be sent out for articulation, make every effort to get it to committee for review by **October 1**. Also, check to make sure that the faculty member promoting the course has met with Jamaika Fowler or Wanda Fulbright-Dennis to review articulation issues BEFORE the course comes to committee.

   - If it is imperative that a course be reviewed for the following fall semester, make every effort to get it to committee in **January**.

   - When the committee has questions or suggestions about a course, Matt Judd will contact the faculty member to identify the problems and suggest revisions. The division office will be copied in the email. Remember that once this contact has been made<u>, the course is put on hold and will stay there indefinitely until the changes are made</u>. Sometimes follow-up at the department level takes a year or even two years! Until the course is officially approved, faculty cannot begin implementing proposed amendments.

   - An important part of the process is that the department as a whole reviews and approves changes to a course or a new course proposal before it goes to the division office. Often when individual faculty members take the course through the approval process, it is not clear that the department as a whole is aware of the specifics. Please support an appropriate course review at the department level before you review and approve courses at the division level.

THE COURSE OUTLINE OF RECORD:
A CURRICULUM REFERENCE GUIDE REVISITED

ADOPTED SPRING 2017

THE ACADEMIC SENATE FOR CALIFORNIA COMMUNITY COLLEGES

CURRICULUM COMMITTEE 2016-2017

DOLORES DAVISON, CHAIR, FOOTHILL COLLEGE

RANDY BEACH, SOUTHWESTERN COLLEGE

MICHAEL BOWEN, VENTURA COLLEGE

KAREN DAAR, LOS ANGELES VALLEY COLLEGE

MICHELLE SAMPAT, MT. SAN ANTONIO COLLEGE

MICHAEL WYLY, SOLANO COLLEGE

Table of Contents

INTRODUCTION

The course outline of record (COR) is central to the curricular processes in the California community colleges. The COR has evolved considerably from its origins as a list of topics covered in a course. Today, the course outline of record is a document with defined legal standing that plays a critical role in the curriculum of the California community colleges. The course outline has both internal and external influences that impact all aspects of its content, from outcomes to teaching methodology, which, by extension, impact program development and program evaluation.

Requirements and standards for the course outline of record appear in Title 5 Regulations (see Appendix 3), in the Chancellor's Office *Program and Course Approval Handbook* (PCAH), and in the Accrediting Commission for Community and Junior Colleges (ACCJC) accreditation standards. System-wide intersegmental general education agreements with the California State University and the University of California (CSU-GE Breadth and IGETC[1] respectively) may also place requirements upon the course outline, such as requiring specific content or requisites or currency of learning materials to satisfy articulation agreements.

Since the COR is also used as the basis for articulation agreements, colleges pay great attention to providing a document with which to determine how a student's community college courses will be counted upon transfer to four-year baccalaureate granting institutions. Course outlines of record are also used in the process of identifying courses that meet the requirements of the Course Identification Numbering System, or C-ID. Additionally, course outlines are regularly reviewed as part of a college's program review process, which is of central importance to accrediting agencies as well as to local planning and resource purposes. For colleges to maintain their delegated authority to review and approve new and revised courses, they must certify that their local approval standards meet the comprehensive guidelines produced by the Chancellor's Office. The quality described in a COR is evidence of meeting these guidelines.

The COR plays a particularly important role in the California community colleges because it clearly lays out the expected content and objectives for a course for use by any faculty member who teaches the course. Course outlines provide a type of quality control, since community college courses are commonly taught by several, and sometimes dozens of, full- and part-time faculty members. In order to ensure that core components are covered in all sections of a course, the integrity of the instruction relies on the COR to specify those elements that will be covered by all faculty members who teach the course.

One of the most significant aspects of a COR is the inclusion of student learning outcomes (SLOs). SLOs can be a driver of many, if not all, elements of a course outline of record. The current commission that accredits nearly all of California's two year colleges mandates that institutions maintain "officially approved and current course outlines of record that include student learning outcomes" (ACCJC Standard IIA3). Colleges have developed multiple interpretations regarding the appropriate physical location of outcomes on a course outline of record, and some institutions have opted to include

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student learning outcomes on an addendum to a COR, while others place the SLOs on the COR next to objectives. Colleges are encouraged to work with their accrediting body to ensure appropriate compliance. A finer distinction between student learning outcomes and course objectives is provided in other sections of this paper.

While state and local standards for a COR have been updated many times and are subject to ongoing revision, numerous resolutions have directed the Academic Senate for California Community Colleges (ASCCC) to provide guidance in the development of course outlines. This update to the original paper *The Course Outline of Record: A Curriculum Reference Guide* (2008), requested by resolution 9.06 S14, is part of the effort to provide that guidance so that faculty might have direction and reasonable assurance that the internal and external course outline of record requirements for the college are met. This updated paper has incorporated the relevant portions of the original document as well as several Academic Senate papers, including *Stylistic Considerations in Writing Course Outlines of Record* (1998), *Good Practices for Course Approvals* (1998), *Noncredit Challenges and Opportunities* (2009), and the *SLO Terminology Glossary* (2009).

The ASCCC also recommends that this paper be used in the context of other documents, including ASCCC papers on *The Curriculum Committee: Role, Structure, Duties, and Standards of Good Practice* (1996) and *Ensuring Effective Curriculum Approval Processes: A Guide for Local Senates* (2016). In addition, the current edition of the Chancellor's Office *Program and Course Approval Handbook* (2016), along with ancillaries to that document, will be relevant for portions of the paper. Finally, the *Accrediting Commission for Community and Junior College's Accreditation Standards* (2014) should be examined in the context of standards relevant to teaching and learning at the course, program, and institutional level. The purpose of these documents is to support the development of a course outline of record in light of the role of local curriculum committees and governing boards in developing and approving curriculum and the role of the Chancellor's Office in approving certificates and programs to ensure compliance.

While this paper offers a model for the course outline of record, it is not intended to force standardization of curriculum. Instead, the paper should serve as a guide to assist faculty in presenting their courses in a format that will accurately reflect the quality of instruction being provided. While the course outline of record is a blueprint of what instructional elements must be included, teaching should always be a dynamic and adaptive process, constantly adjusting to accommodate the ever-changing, diverse learning needs of students in the California community colleges. The model presented is intended to clearly demonstrate that the course will stand up to the rigor established by Education Code and Title 5 Regulations, transfer institutions, accrediting bodies, and other external entities.

HOW TO USE THIS PAPER

This paper is intended to serve the needs of both new and experienced faculty members in writing a course outline of record. Credit and noncredit course outlines are treated separately, not because the differences between the two are significant but because in all likelihood the faculty member writing a noncredit course outline needs ready access to other sections related to noncredit courses more than related information for credit course outlines.

This paper is not focused on the development of programs leading to degrees and certificates. While the context of program development and evaluation is important in the development of course outlines of record and is reflected in the discussion of the elements of the COR, for specific information about the requirements for submitting programs for approval to the Chancellor's Office, one should refer to the *Program and Course Approval Handbook* as well as the forthcoming ASCCC paper on course and program development.

For a new faculty member writing a course outline, or for those who need a refresher, the first section of the paper, "Planning the Course Outline of Record," discusses planning considerations for developing a COR, including the need to consider how the course outline integrates with numerous curriculum processes, the course learning outcomes, and the resources that should be collected as one embarks on the writing or revision of a course outline of record.

The second section of the paper, "Components of a Course Outline of Record," details each element required for a course outline of record. The elements are presented in the order typically found in many CORs, which is similar to the order found in Title 5 §55002, Standards and Criteria for Courses.

The final section of the paper, "General Curriculum Considerations," contains further background and detailed information about curriculum requirements outlined within Title 5 that go beyond the COR.

The appendices include a glossary of the terms commonly used in curriculum development, a list of references organized by curriculum topic, references to Title 5 regulatory language, and examples of course outlines of record.

PLANNING THE COURSE OUTLINE OF RECORD

Initial Considerations

The development of curriculum is something that should be undertaken by faculty; while administrators or others might have ideas about courses or programs, the primary responsibility must always reside with the faculty. In most cases, the faculty member will initiate this effort based upon the questions "What do we need students to be able to do, and what do they need to know to be able to do it?" The idea for courses may also originate from some identified need, such as a course that would improve job readiness for a new or revised program or one that is needed for transfer into a particular major. Regardless of the motivation, the faculty member should begin with a holistic vision of the course to be proposed and an awareness of the skills or abilities that a student should be able to demonstrate as a result of successfully completing the course.

After determining a need and a rationale for a course, the next consideration is to determine what the course's roles will be. Is the course intended to be degree applicable? Will it transfer? Is it appropriate as

a general education course? What articulation should be sought? These questions are just a few of many to consider prior to beginning the development of any course outline of record.

While each required course element must be written discretely, each element should also take into account other components to assure the final course outline is constructed in an integrated manner. For example, an interwoven relationship should exist between the discrete skills and content students should learn (course objectives), how proficiency in those objectives will be evaluated (methods of evaluation), and the measurable skills and abilities that students are able to demonstrate subsequent to completing the course (student learning outcomes). Furthermore, the objectives and outcomes must have a clear relationship to the subject or content. The COR should reflect a quality in the course sufficient to attain the objectives and the resulting outcomes.

Central to the regulatory intent of collegial consultation is the faculty's primacy in the role of ensuring quality instruction through the development of integrated course outlines of record. The outline must contain all the elements specified in Title 5 §§55002.(a), (b), or (c): unit value, contact hours, requisites, catalog description, objectives, and content. The outline must also include types or examples of assignments, instructional methodology, and methods of evaluation. The course outline must be rigorous and effective in integrating the required components of critical thinking, essay writing and problem solving, college-level skills, and vocabulary if such skills are appropriate for the type of course being developed. In addition, the course must comply with any other applicable laws, such as those related to access for students with disabilities. A COR also must address any requirements based on accreditation.

Stylistic concerns are also important. Research on curriculum and instructional design suggests that the COR faculty author should be very specific when articulating what the student will be able to accomplish by the end of the course and defining how the instructor will evaluate the student's progress. The use of a taxonomy of learning, such as Bloom's Taxonomy, is recommended for consistency of language and rigor. After this development, the content items, learning materials, class enrollment maximums if such matters are not a contractual issue locally, the units and contact hours, and other features can all be fleshed out with a specific focus on integrating each of these areas so that they validate the need for each component in multiple ways. Stylistic issues also matter in the articulation process. Faculty developing transferable courses should be mindful of the language in course outlines at the receiving institutions to ensure articulation agreements are reached smoothly.

Irrespective of how the course outline is structured and written, the faculty member will generally produce a more robust product not by starting at one end and working towards the other but rather by being creative where doing so is most easy or enjoyable. The faculty member can then build upon these initial areas to develop the other elements or fill-in unanticipated gaps as they become apparent. For many faculty, the initial drafting might be in the content areas. From there, a faculty member can expand into the writing of learning objectives, textbook selection, and the number of course hours needed to cover the material. In short, a constant and necessary interplay should take place in the development of the elements of the course outline once the desired learning outcomes have been established.

Writing an Integrated Course Outline

A course outline of record needs to be integrated, as each element of the COR should reinforce the purpose of the other elements in the course outline. An obvious relationship should exist between the objectives of the course, the methods of instruction, assignments, and methods of evaluation used to promote and evaluate student mastery of those objectives and outcomes.

At the onset, every course should be developed with a purpose or goal in mind. The course must have sufficient and appropriate learning objectives that create a framework for students to develop their knowledge and abilities in order to demonstrate the overarching student learning outcomes and fulfill the intended purpose of the course. The course content items then define the elements of information, behavior, or capabilities for each objective to be mastered. Each content item and objective is then reflected in comprehensive assignments or lessons that are taught using appropriate and effective methods. Finally, in an integrated course outline of record, the methods for evaluation of student performance validate the acquisition and mastery of each content item and the attainment of each objective. These methods of assessment may also serve to measure student achievement of the defined student learning outcomes, or additional methods may be useful. Content should be the only subject-based element; the others specifically focus on what the student will be doing and will be able to demonstrate by successfully completing the course.

Resources for the Faculty Member

While all course outline development must comply with Title 5 §55002, many colleges have created a template for the course outline that includes the required elements as well as many local elements. A college may use a curriculum management system for tracking its curriculum approval process and as its repository for course outlines as well as for submitting that information to the Chancellor's Office; however, technology should support the process, not drive it. An effective template will help the faculty member compile all of the required information prior to submission. However, the responsibility for completing every outline element may not fall upon the individual faculty member. For example, numerical course identifiers or transferability may be addressed much later in the approval process, although local practice may provide for the faculty member to indicate the intent for the course to eventually to be transferable.

The following are useful documents for a faculty member to have at hand when developing a COR: the college catalog, some recently approved course outlines to serve as examples, any supplemental addenda or forms dictated by the instructional modality such as a separate distance education form or content review form, standards established by the discipline either locally or by a professional organization or by external accreditors or regulatory bodies, and any special district policies that may apply. Often local curriculum committees have created their own curriculum development handbooks that contain much of this information.

Making use of human resources is also important. Consulting with other faculty in the discipline is essential. The faculty writer should also identify other faculty members who are familiar with the local process to assist. The curriculum committee chair may be available to provide guidance, as well as members of the curriculum committee, curriculum specialists or technicians, and administrators involved in curricular practices such as a dean or chief instructional officer.

The final and equally critical tools are references relevant to the subject matter being taught. From a planning perspective, the faculty should acquire these resources first and then examine the most effective and reliable methods to promote learning within the intended learning environments available for the delivery of this subject. For example, planning for allied health courses must take into consideration equipment needs and safety concerns to promote effective learning as well as the pedagogy of the discipline. The dean or CIO overseeing a particular department may have the information needed for these types of resources.

With resources at hand, the faculty author can begin to consider creating the various elements of the course outline of record.

Outcomes, Accreditation, and the Course Outline

For California's community colleges, several accreditation standards regarding student learning outcomes touch on the COR. Standard II.A.3 states, "The institution has officially approved and current course outlines that include student learning outcomes." This statement has been interpreted in different ways, with some colleges choosing to include SLOs as addenda to their CORs housed within their course outline management systems, while others include the SLOs in the COR itself. While a definitive interpretation has not been established, colleges should continue to work with their accrediting agency to ensure compliance. Additionally, Standard I.C. Institutional Integrity lists many areas in which colleges must ensure that accurate information is provided for students, including learning outcomes and educational programs. Colleges would be wise to maintain accurate CORs to fulfill the spirit of this standard.

SLOs can act as a central component in the development of many elements of both credit and noncredit courses. Per the accreditation standards, assessment data collected by faculty on outcomes, along with other information, must be reviewed and used to create action plans intended to improve teaching practices and student success at the course and program level. Many colleges use a data mapping process that links course student learning outcomes (CSLOs) found on the COR to program student learning outcomes (PSLOs) in order that the data collected at the CSLO level provides data for PSLO assessment. Given the importance of these links between the CSLOs and the PSLOs, faculty should begin course development and review of objectives and other elements of the COR with an analysis of how the CSLOs support student attainment of the PSLOs for those programs that include the course being reviewed. This practice ensures that students taking the courses and performing the SLOs of those courses will also be able to perform the PSLOs for their programs.

A similar situation exists for institutional student learning outcomes (ISLOs) and general education learning outcomes (GELOs). All course learning outcomes should align with either the ISLOs of the college or the GELOs for students enrolled in programs that include a GE component. ACCJC Standard II.A.12 states, "The institution, relying on faculty expertise, determines the appropriateness of each course for inclusion in the general education curriculum, based upon student learning outcomes and competencies appropriate to the degree level." Similar mappings between CSLOs and

ISLOs or GELOs are often the source for data reports used for annual accreditation reporting and for institution-wide discussion of student success. Given the potential widespread reach of ISLO and GELO data, faculty should discuss CSLOs with these implications in mind.

COMPONENTS OF A COURSE OUTLINE OF RECORD

ELEMENTS THAT APPLY TO CREDIT AND NONCREDIT COURSES

Course outlines of record must be approved by the local curriculum committee before being submitted to the board of trustees for approval and the Chancellor's Office for chaptering. The following elements of a course outline of record are items that reflect requirements from Title 5 §55002, "Standards and Criteria for Courses," other sections of Title 5, Chancellor's Office guidelines, and accreditation standards. However, some of these elements may not apply to all types of courses.

Need/Justification/Goals

The purpose of this section is to provide guidance for faculty to meet the criteria spelled out in the *Program and Course Approval Handbook* regarding documenting what student need the course is intended to meet. According to the PCAH, "The proposal must demonstrate a need for a program or course that meets the stated goals and objectives in the region the college proposes to serve with the program" (8).

Mission

The mission of the college should drive all curriculum development as well as potential revision when the mission of the college is changed or expanded. Currently Education Code § 66010.4 defines the mission of the California community colleges as focused on lower division transfer preparation, vocational education, and basic skills education. However, many colleges have additional aspects of their missions which might also drive curriculum development, such as diversity of student population or interest in adult education. Local curriculum processes should include questions that prompt faculty to consider the mission when making new course proposals, revising existing courses, or adding new courses to programs. Accreditation standards for many agencies also involve the role of the college mission in institutional planning and may therefore need to be considered in terms of curriculum development and revision.

The Role of a Course

For transfer programs and courses, the role of and need for a course is more easily established by determining both student demand and transfer applicability for existing university majors. For career technical programs and courses, this role and need can be more challenging to establish and must rely

on evidence such as labor market data, potential employer needs, advisory committee input, and job advertising information, to name a few. Additionally, some districts have research capabilities that can assist with this research and know where to access the data.

Statement of Need

Once the need has been determined and documented, the statement of need should establish the role of the course in the major programs or general education areas in which it is designed to serve. If it is a stand-alone course, which is a course that is not part of a program, then its role in the college's curriculum should be explained as part of a proposal. In particular, this rationale should explain how existing courses do not meet this identified need and clearly distinguish the role of the proposed course from that of similar courses.

Examples of need statements:

- Medical Terminology I provides a basic introduction to students in all allied health majors. By combining portions of existing courses in those majors, this course allows those programs to provide more emphasis on content. An added advantage will be more flexibility in section offerings as well as emphasizing medical terminology across all specialties.

- This course has been proposed to meet a new requirement expected for students pursuing employment in the hazardous materials technology industry, which is now required for certification in fire science.

- This course in Jazz and Blues Music grew out of increasing student demand, as demonstrated by wait list data and student surveys, for more on this subject than is currently being covered in our Popular American Music course. This new course will be part of the restricted elective list for those majoring in music.

Differentiating Courses

Course outlines of record should be created with other courses in mind, particularly when similarities exist among them. When a course is part of a sequence, great care should be taken in the development process to show the progression of rigor in the sequence of courses or the different objectives, content, or outcomes that make the course different from others and an essential part of a program. For non-sequential but similar courses, similar steps should be taken to ensure non-duplication of coursework that may confuse students and dilute student demand. Areas on a COR that provide opportunity for clear distinctions to be made among courses include the description, the objectives, core content, examples of assignments, and student learning outcomes.

Course Description

When any course is developed, the course purpose or description sets the stage for all subsequent elements on the COR. Embedded within a course's description are the reasons that the course exists and a holistic overview of objectives, content, and outcomes. Without this defining statement, instructors teaching sections of a course may be unclear on the scope of the course, how content should be taught, or how discrete objectives or the overarching student learning outcomes statements should be assessed. A course without a description that is clearly distinct from another course should not exist, and all courses should include defined student learning outcomes relevant to and supported by the course objectives.

External Research Requirements

Some fields of study stay similar over time, while others change and evolve comparatively quickly. For every course, a periodic consideration of outside influences should be conducted. When external research requirements are mandated or necessary, faculty should consider these triggers as a prelude to the development or revision of a COR. External accreditation bodies, career-technical education advisory committees, discipline professional organizations, local college-business partnerships, and agreements between the community college and any baccalaureate-granting institutions are all examples of such requirements by external bodies that may necessitate development or revision.

CHANCELLOR'S OFFICE DATA ELEMENTS

Stand Alone Courses

The Chancellor's Office refers to courses that are not part of a program leading to an award as stand-alone courses. Stand-alone courses may be approved and offered locally without Chancellor's Office review. Stand-alone courses often meet a specific local need. This term also refers to credit courses required for a certificate of fewer than 18 semester units or 27 quarter units that has not been approved by the Chancellor's Office. In addition, courses such as learning skills or tutoring courses may be considered stand-alone. Like other courses, a stand-alone course must have a control number prior to being offered and claimed for apportionment, contain all required elements, and meet all standards of approval as required by Title 5. Additional guidance for creating stand-alone courses is available on the Chancellor's Office's website.

Title

All courses must have titles that should be considered from the perspective of students as well as potential employers and transfer institutions. While overly specific titles can be cumbersome, the title of the course should provide enough information so that prospective students will easily identify the general purpose of the course. Course titles take on extra significance when courses are reviewed by articulating institutions and potential employers who use college transcripts when considering students for transfer credit or employment.

Elements Related to Currency

Curriculum must be current to be relevant. While Title 5 requires review of all prerequisites and corequisites at least once each six years and prerequisites and corequisites for career technical courses every two years, most colleges apply that timeline not only to requisite review but to review of the entire course. In addition, accreditation and articulation processes also have currency requirements, as do many grants and other external agencies. Typically, the course outline of record will have some method for tracking revision dates to meet these needs.

Course Control Numbers and Chaptering

Courses are submitted electronically to the Chancellor's Office Curriculum Inventory (COCI). Credit course proposals are certified by the chief instructional officer and the curriculum chair at a college, approved by the board of trustees, and then submitted to the Chancellor's Office for chaptering prior to being offered at the community college. The Chancellor's Office provides a unique control number for every course to ensure data accuracy, which is critical to measuring student success indicators. The unique identifier should be included on the course outline of record for easy reference and will likely be assigned as a part of the approval process.

Local curriculum approval processes may provide some of these data elements outside of the faculty's normal role. But local process development must reflect faculty primacy in all matters pertaining to the course outline of record.

The Chancellor's Office reviews noncredit course submissions to ensure that the associated data elements for each course are correct and compliant with regulations. Credit courses are checked within the COCI to ensure that the data elements are correct. These course data elements will be reported to the Management Information System (MIS). While no regulatory requirement mandates that these elements be listed in the course outline of record, good practice suggests that MIS elements should be included as part of the local curriculum review and submission process either within the COR or as attachments and that faculty should be involved in the determination of these elements. Criteria for Data Elements include the following:

DED NO	DATA ELEMENT NAME
CB01	Course Department and Number
CB02	Course Title
CB03	Course TOP Code
CB04	Course Credit Status
CB05	Course Transfer Status
CB06	Units of Credit – Maximum
CB07	Units of Credit – Minimum
CB08	Course Basic Skills Status

CB09	Course SAM Priority Code
CB10	Course Cooperative Work Experience Education Status
CB11	Course Classification Status
CB13	Educational Assistance Class Instruction (Approved Special Class)
CB21	Course Prior to Transfer Level
CB23	Funding Agency Category
CB24	Course Program Status

TITLE 5—STANDARDS FOR APPROVAL

Title 5 contains seven standards for approval that apply to degree-applicable credit courses, four of which also apply to nondegree-applicable credit courses. Grading policy, units, intensity, and prerequisites and corequisites apply to all credit courses. Basic skills requirements, difficulty, and level apply to degree-applicable credit courses only. These standards are the criteria by which the faculty member's intention to ensure quality will be assessed for college or pre-college level instruction.

Intensity, difficulty, and level are not reflected as discrete elements in the course outline of record but rather are met within the totality of the course outline.

Degree-Applicable Courses

For degree-applicable courses, difficulty calls for critical thinking, understanding, and application of concepts at the college level, and intensity sets a requirement that most students will need to study independently, possibly for periods beyond that of the total course time defined by the units. The outline should build the case that students will be required to study independently outside of the class time. Reading, writing, and other outside assignments qualify to fulfill both study time as defined in the credit hour and the independent study required to demonstrate intensity. A faculty member who creates a course based solely upon laboratory or activity or lecture time with no designated outside study time will still need to demonstrate a depth and breadth of student learning that requires student effort beyond class time. The level standard requires college-level learning skills and vocabulary.

Nondegree-Applicable Courses

For nondegree-applicable credit courses, the intensity standard requires instruction in critical thinking and refers to the preparation of students for the independent work they will do in degree-applicable courses, including the development of self-direction and self-motivation. The level standard is not required for nondegree-applicable courses, but factors such as the units standard should reflect course workload variations appropriate to the developmental level of the students. Nothing prohibits a nondegree-applicable course from having elements that meet these two standards.

Standards for Approval for Noncredit

The standards for approval of noncredit courses places the burden upon the curriculum committee for determining that the level, rigor, and quality is appropriate for the enrolled students. Where appropriate, these standards for approval are included in each element under the sub-heading "Regulatory Requirements—Title 5."

Required Elements of a COR per Title 5 §55002

The Chancellor's Office review process requires the submission of a course outline of record that meets the standards for courses established in §55002 of Title 5 and contains, at minimum, the following elements:

1.   Unit Value

2.   The expected required number of contact hours

3.   Requisites

4.   Catalog description

5.   Objectives

6.   Content

7.   Required reading and writing assignments

8.   Other outside–of-class assignments

9.   Instructional methodology

10. Methods of evaluation

DISCIPLINE ASSIGNMENT

Assigning Courses to a Discipline

Each course must be assigned by the local curriculum committee to an appropriate discipline or disciplines. This assignment helps describe the course by classifying it in a discipline and also indicates the minimum qualifications required to teach the course. This discussion should be part of the curriculum committee's regular meetings regarding placement of courses.

Minimum Qualifications

Assignable disciplines are those that appear in the publication *Minimum Qualifications for Faculty and Administrators in California Community Colleges*, also known as the "Disciplines List." Generally, a course is assigned to a single discipline. However, some courses may be cross-listed or placed in two or more disciplines. For example, a course on the sociology of aging may be appropriately assigned to either the discipline of sociology or the discipline of psychology, meaning a faculty member meeting the

minimum qualifications of the discipline to which it is assigned would be able to teach the course. In the case of a course assigned to the disciplines of both sociology and psychology, the faculty member teaching the course would need to meet the minimum qualifications in both disciplines. Some courses can also be listed in the interdisciplinary studies discipline, which is the combination of two or more disciplines. In such a case, the faculty member must meet the minimum qualifications of one of the disciplines listed for interdisciplinary studies and have completed upper division or graduate courses in at least one of the other disciplines listed.

Minimum Qualifications for Noncredit Courses

Noncredit minimum qualifications are also discussed in *Minimum Qualifications for Faculty and Administrators in the California Community Colleges*. However, noncredit minimum qualifications are established in Title 5 §53412 rather than in the Disciplines List. The assignment of noncredit courses to these areas should be approved by the curriculum committee just as it is done in credit instruction. Again, this process ensures that faculty with the appropriate expertise will teach the course, whether it is credit or noncredit.

Title 5 does not require that discipline assignment designations be contained within the course outline of record, but these assignments do need to be monitored, and the COR is a convenient location that will provide appropriate direction to those who would assign faculty to teach the course. The ASCCC's adopted position is that discipline designation should be an element of the COR. The ASCCC paper *Qualifications For Faculty Service In The California Community Colleges: Minimum Qualifications, Placement Of Courses Within Disciplines, And Faculty Service Areas* (2004) states, "For clarity and as a convenient reference, discipline designations should appear on course outlines of record." Such an indication in the COR can also be an effective practice to prevent confusion in multi-college districts.

ELEMENTS THAT APPLY TO CREDIT COURSES

UNIT VALUE AND CONTACT HOURS

Units, Credit Hours and Learning

A course outline of record that is well integrated will have built a solid case for the number of units granted for the learning achieved by a successful student. The definition of a credit hour requires a minimum of 48 semester or 33 quarter hours of lecture, laboratory or activity, or study time or any combination thereof. Faculty developers of courses designed for transfer and for some highly regulated career-technical fields need to refer to applicable standards, as they may require specific ratios of lecture, lab, and study time. Faculty must be thoughtful about units and contact hours, taking into account elements including student need, potential effects on financial aid eligibility, enrollment priorities, and other concerns.

Variable Credit Hours

Title 5 regulations also provide for variable unit courses. Such courses include work experience, activity courses where the number of units can vary from term to term, and skill courses where a student registers for the number of units he or she anticipates completing. The *Program and Course Approval Handbook* indicates that colleges may award credit in increments of one half unit or smaller but that they may not approve credit courses with zero units of credit (5th edition, page 81). Calculations for each increment of credit awarded by the college represent the minimum threshold for awarding that increment of credit. Students are awarded the next increment of credit only when they pass the next minimum threshold.

Because of the unique nature of these courses, colleges take different approaches to how variable unit calculations are implemented locally. A faculty member who is unfamiliar with variable unit courses should seek guidance from his or her curriculum committee chair or other appropriate college personnel, especially when calculating variable hours for courses that students may repeat.

Standard Formula for Credit Hour Calculation

Standards for credit hour calculations are contained in Title 5 §§55002.5, 55002. (a)(2)(B), and 55002(b)(2)(B). Courses not classified as cooperative work experience, clock hour, or open entry/open exit use the following method for calculating units of credit:

Divide the total of all student learning hours, which is the combination of total contact hours (lecture, lab, activity, clinical, TBA, or other) and outside-of-class hours, by the hours-per-unit divisor and round down to the nearest increment of credit awarded by the college. The following definitions are used in the application of this formula.

- Total contact hours refers to the total time per term that a student is under the direct supervision of an instructor or other qualified employee as defined in Title 5 §§58050 - 58051. This number is the sum of all contact hours for the course in all calculations categories, including lecture, recitation, discussion, seminar, laboratory, clinical, studio, practica, activity, to-be-arranged, etc. Contact hours for courses may include hours assigned to more than one instructional category, such as lecture and laboratory, lecture and activity, or lecture and clinical.

- Outside-of-class hours are the hours a student is expected to engage in coursework outside of the classroom. Federal and state regulations for credit hour calculations are based on the total time a student spends on learning, including outside-of-class hours. As a matter of standard practice in higher education, lecture and related course formats require two hours of student work outside of class for every hour in-class. All other academic work, including laboratory, activity, studio, clinical, practica, TBA, etc., must provide an equivalent total number of student learning hours as typically required for lecture, with the ratio of in-class to outside-of-class work prorated appropriately for the instructional category. This ratio is reviewed by accrediting commissions to ensure that it is in compliance with federal regulations regarding credit hours.

Typically, these ratios are expressed as follows:

Instructional Category	In-class Hours	Outside-of-class Hours
Lecture (lecture, discussion, seminar and related work)	1	2
Activity (activity, lab w/ homework, studio, and similar)	2	1
Laboratory (traditional lab, natural science lab, clinical, and similar)	3	0

Variations or ratios for inside- to outside-of-class hours are possible but should fall within the parameters for one unit of credit as described above. Standard expectations in higher education for credit hour calculations generally align with the in-class to outside-of-class ratios as described in this table. Deviations from these widely accepted standards, while permitted, can negatively affect course transferability and articulation and should be used with caution. Since TBA hours are required to be listed separately on the COR, any outside-of-class hours expected of students in relationship to TBA contact hours must be included in the total student learning hours for the calculation.

- ◆ The hours-per-unit divisor is a value, or value range, used by the college to define the number of hours required to award each unit of credit. This value must be minimum of 48 and maximum of 54 hours for colleges on the semester system and a minimum of 33 and maximum of 36 for colleges on the quarter system. This number represents the total student learning hours for which the college awards one unit of credit. Colleges may use any divisor within this range but should maintain consistency between the divisor and the dividend. For example, if a college uses a 51 hours = 1 unit calculation to determine the hours of lecture and outside of class work in the dividend, it should use 51 as the divisor. Colleges that indicate the minimum and maximum range of 48 – 54 should show that same range for the dividend in the equation and resulting unit calculation.

The credit hour calculation would be expressed as an equation as follows:

$$\frac{[\text{Total Contact Hours} + \text{Outside-of-class Hours}]}{\text{Hours-per-unit Divisor}}$$

The result of this calculation is then rounded down to the nearest .5 increment or to the nearest fractional unit award used by the district if smaller than .5. This formula applies to both semester and quarter credit calculations. While the formula can yield a value below the lowest increment of credit awarded by the college, zero-unit courses are not permissible. See Appendix I for the memo from the Chancellor's Office regarding the standard formula for credit hour calculations.

Colleges must exercise caution in determining the hours-per-unit divisor for credit hour calculations. Because California finance laws assume that primary terms average 17 weeks on the semester system and 112/3 weeks on the quarter system, with two semesters or three quarters equaling the traditional 35-week academic year, and because student attendance and related apportionment state compliance

auditing is based on the student contact hours delineated in the official COR, the Chancellor's Office strongly recommends that colleges use the 18-week semester or 12-week quarter as the basis for the student contact hour calculation used in the COR, even if a college has been approved to use a compressed academic calendar. This practice indicates the use of 54 semester or 36 quarter hours. The 18-week semester or 12-week quarter primary term provides the greatest flexibility in terms of contact hours, and colleges do not risk an audit finding for excessive apportionment claims such as they might experience using a 16-week semester basis for the contact-hour calculation.

Additionally, the flexible calendar program is designed around the 35-week traditional academic calendar, so basing contact hour targets around an 18-week semester assures that instructional hours lost to flex activities will not result in the district failing to provide the minimum number of hours required by Title 5 §55002.5 to award a unit of credit. Colleges using the 48-hour minimum calculation for determining credit hours risk problems with apportionment calculations and audits. Colleges must be specifically authorized by the Chancellor's Office to use a compressed calendar, which adds further caution to the use of the minimum end of the hour to unit range.

Likewise, the activity or laboratory with homework calculation should be used with caution. In the natural sciences and other disciplines, standard practice is to base the number of units awarded for laboratory solely on contact hours, even though the course may involve some expectation of student work or preparation outside of class. Any alteration of this relationship for laboratory courses in the natural sciences and clinical hours in many allied health fields can jeopardize programmatic accreditation where specific ratios or hours are required for program components or course acceptability in meeting major or general education requirements when transferred to a baccalaureate degree-granting institution. Use of this category should be restricted to only those instructional areas where it is clearly aligned with accepted practices of higher education. The term "activity" as used in this context is not intended to limit or define the use of this term locally. Some colleges use this term— and related credit calculations—interchangeably with laboratory.

The course outlines of record for many districts do not specify outside-of-class hours, relying instead on the assumption of traditional ratios for inside- to outside-of-class hours for lecture, laboratory, or other course formats. In instances where districts only record total contact hours for the course as a whole or in each instructional category on the COR, the course submission must include the expected hours of student work outside of class used to determine total student learning hours for the purposes of credit calculations as described above. The ratio table presented earlier in this section provides guidance for the expected outside-of-class hours for a wide range of typical credit hour calculations.

Fractional Unit Awards and Minimum Thresholds

The fifth edition of the *Program and Course Approval Handbook* states that "a district may choose to award units of credit in increments of one half or smaller" (page 81). Calculations for each increment of credit awarded by the college represent a threshold of student learning hours for awarding that increment of credit. Students are awarded the next increment of credit only when they pass the next threshold of student learning hours.

For example, if a course is designed to require 180 total student learning hours (36 lecture, 72 lab, and 72 outside-of-class hours), the calculation of units works as follows:

$$180/54 = 3.33$$
3 units of credit

In this example, the college would not award 3.5 units until the total student learning hours reached the 189-hour minimum threshold for 3.5 units. However, if a college offers credit in .25 unit increments, this example would yield a 3.25 unit course. Another common example is a course offered for 40 contact hours with no hours of homework, resulting in 40 total student learning hours. In a district that awards credit in .5 increments, 40 total student learning hours/54 = .74, which meets the minimum threshold for .5 units of credit, but does not pass the minimum threshold for 1 unit of credit. In this example, 40 total student learning hours (36 contact and 4 outside-of-class) would award .5 units of credit. This calculation is similar to grading systems where, for example, a student earns a "B" for any percentage between 80 and 89. The student is only awarded an "A" when he or she reaches the minimum threshold of 90%.

Cooperative Work Experience

Units for Cooperative Work Experience courses are calculated as follows in Title 5 §55256.5:

Each 75 hours of paid work equals one semester credit, or 50 hours equals one quarter credit.

Each 60 hours of non-paid work equals one semester credit, or 40 hours equals one quarter credit. These minimums have been interpreted by the Chancellor's Office but are currently under review and may be subject to change.

Clock Hour Courses and Programs

The definition of a clock hour program and the standards for awarding of units of credit for these programs are defined in federal regulations 34 CFR §668.8(k)(2)(i)(A) and 668.8(l) respectively. In this regulation, a program is considered to be a clock-hour program if the program is required to measure student progress in clock hours under the following conditions:

- Receiving federal or state approval or licensure to offer the program; or
- Completing clock hours is a requirement for graduates to apply for licensure or the authorization to practice the occupation that the student is intending to pursue.

Programs that meet this definition are required to use a federal formula for determining the appropriate awarding of credit as outlined in 34 CFR §668.8(l).

Local Policy

A standing policy or formal calculation document helps districts fulfill the responsibility of local governing boards under Title 5 §55002 to establish the relationship between units and hours for the local curriculum development and approval process and provides that information for accreditation purposes.

PREREQUISITES, COREQUISITES, ADVISORIES, AND OTHER LIMITATIONS ON ENROLLMENT

Demonstrating and Documenting Need

Justification of prerequisites requires documentation, and colleges have generally developed forms for the various types of evidence. This evidence can take many forms: equivalent prerequisites at UC or CSU, content review, legal codes mandating the requisite, or data collection and analysis. While these forms are not required to be part of the course outline, they are often attached as documentation of the process having been completed. Subdivision I.C.3, A, 2(a)vii of the *Model District Policy on Requisites* (Chancellor's Office, 1993) strongly advises that districts "maintain documentation that the above steps were taken," and additional guidelines were released by the Chancellor's Office for Title 5 §55003 in 2012. A simple method for achieving this record is to retain the content skills scrutiny documents for each requisite course.

Content Review

All courses with requisites or advisories must document the requisite skills which have been established through content review in a separate section of the course outline. The primary goal of identifying requisites and providing advisories is to facilitate student success. A content review process should document that connection by showing how the skills achieved in the requisite course are fundamental to success for most students taking the receiving course. The writing style of the prerequisite skills section is the same as that for the objectives. The section usually begins with a phrase such as "Upon entering this course, the student should be able to" followed by a list of those entry skills, expressed using active learning verbs following a taxonomy such as Bloom's. In its simplest form, a content review consists of comparing the entry skills list with the objectives of one or more courses to identify courses that would be appropriate requisites. This list of entry skills is also very useful in determining articulation pathways for students coming from other institutions or life experiences.

If a course has more than one requisite course, effective practice is to have separate lists for each one, which may make tracking their validation easier. For example, if an advanced physics class has both a calculus and a pre-calculus physics prerequisite, this section would have two separate lists.

Content Review, Statistical Validation, and Communication/Computation Requisites

For programs specializing in communication and computation, requisites may be placed on courses using a content review process alone, without a need for statistical validation. Since 2011 colleges have been allowed by Title 5 to place communication and computation prerequisite courses on non-communication and non-computation courses through a content review process alone provided that the district meets specific criteria explained in Title 5 §55003(c). If the conditions of this section are not met, colleges must follow the same guidelines that exist for establishing prerequisites in all other areas, which require statistical validation using "the compilation of data according to sound research practices" per Title 5 §55003(f). For example, an English course having a prerequisite of a lower-level English course may validate this need through content review. A business course requiring that same lower-level English course may also use content review to establish the prerequisite is the requirements of Title 5 §55003(c) have been met; if these requirements are not met, the college may establish the prerequisite through a combination of content review and statistical validation. Further information regarding prerequisites for communication and computation can be found in the *Chancellor's Office Guidelines for Title 5 Regulations Section 55003* (2011).

Requisites and Articulation

When considering placing a requisite on a course, faculty should consider the impact that action may have on proposed or existing articulation agreements. When determining whether to grant articulation, receiving institutions will closely review any requisites on a course, or the lack of a requisite that they consider essential, as indicators of the scope and rigor of the course. Faculty should review parallel courses at the primary institutions for transfer in their region to be aware of requisite expectations local CSUs and UCs have on comparable courses. In addition to reviewing university courses, faculty should consider any requisites identified in course descriptors created through the Course Identification Number (C-ID) System.

Other Limitations on Enrollment

A course may have enrollment limitations other than prerequisites, corequisites or advisories. Some common limitations on enrollment are a requirement to pass a tryout prior to being enrolled in an athletic course or as a member of a team or a physical requirement where the student's safety would be compromised by an inability to meet specific physical capabilities. While the specific criteria for the limitation does not have to be included in the course outline of record, such limitations should be well defined and be as measurably objective as possible. For example, a sight acuity limitation might include specific vision parameters and list any medical conditions that impose or exacerbate the limitation. If the limitation is a tryout for athletics, the criteria should be very specific and realistic to the demands of the activity. Thus, "be able to swim ten laps in a standard competition pool in under eight minutes" would be reasonable for a water polo tryout, but requiring this task be completed in less than two minutes would be extreme. All limitations on enrollment should be fair and reasonable and should produce consistent evaluation results.

CATALOG DESCRIPTION

The purpose of the catalog description is to publicly convey the content of the course in a concise manner. Because the catalog description is the primary way by which course information is disseminated, it should contain all essential information about the course and be written to meet the needs of varied audiences. Students need information to create their educational plans, as do counseling faculty advising them. Outside reviewers, such as accreditors and compliance monitors, base their assessments on the information printed in the catalog. The heart of the catalog description is the summary of course content, also referred to as the course description. The catalog description should be thorough enough to establish the comparability of the course to courses at other colleges, to distinguish it from other courses at the college, and to convey the role of the course in the curriculum of a program, where applicable, in regards to progression of rigor or other characteristics that distinguish a course in the program. A statement about the students for whom the course is intended can assist students in their educational planning. Examples of this type of information include "first course in the graphic arts major" or "intended for students in allied health majors." To save space, many colleges use phrases rather than complete sentences in the catalog or the schedule of classes. Course descriptions should also include the course's C-ID number if applicable.

Units, Hours, and Credit Status

The catalog description should contain the units, hours, prerequisites, transferability, and credit status of the course. Unit limitations should be specified, such as "no credit for students who have completed Math 101A" and "UC transferable units limited." Hours are typically listed on a COR on a per week basis and may be broken down by type: for example, "3 hours lecture, 3 hours lab, 1 hour discussion." The types of hours may also be listed as activity or studio hours in appropriate courses.

Variable unit courses should show the hours as variable: for example, "1-3 hours lecture, 1-3 units." However, some colleges' CORs show the total hours of instruction for the term rather than the weekly hours. This practice is particularly useful for courses offered in a variety of short-term formats as well as for work experience courses. However, for regularly scheduled courses, listing weekly hours more clearly and directly serves the primary audience.

In addition to listing the number of hours per week or total hours per term, the description may specify courses regularly offered on a short-term basis as well: "9-week course" or "Saturday course; see page xx for more information." Some colleges include the terms in which the course will be offered, such as "summer only." Some courses designated as repeatable may be taken multiple times if appropriate criteria are met. In the case of a repeatable variable unit course, the description may need to list total units that may be earned by repetition. For example, a COR might say, "Variable Units - May be repeated; students may not exceed 16 units." All courses must follow unit and credit hour requirements of Title 5 §55002.5.

Courses may be offered on a letter grade basis only, on a Pass/No-Pass basis only, or on a letter grade or Pass/No-Pass basis at the option of the student. Generally, course credit is assumed to be awarded on a letter grade basis unless indicated otherwise through catalog statements such as "pass/no pass

only" or "pass/no pass option." Courses are also assumed to be degree applicable unless otherwise noted as "non-degree applicable credit course" or "noncredit course." However, some districts may separate catalogs into credit and noncredit sections due in part to their organizational structure and the relative size of their noncredit programs.

Requisites and Transferability

Prerequisites, corequisites, and advisories can be listed in conjunction with placement assessment alternatives along with limitations on enrollment as well as any other skills required or recommended. The following are examples of ways in which requisites might be included on a COR:

- Prerequisite: Completion of French 1A with a 'C' or better
- Corequisite: Geology 10
- Prerequisite: Math 24 (with a 'C' or higher) or appropriate skills demonstrated through the math placement process
- Advisory on Recommended Preparation: Eligibility for English 1A
- Advisory: High school biology with a "B" or better is recommended
- Advisory: Reading level 3 (see p. 17)
- Limitation: Enrollment limited by audition

Catalog descriptions commonly include the transferability of the course, usually by indicating "UC," "CSU," or "UC, CSU" as appropriate at the end of the catalog description. Such a notation indicates only general transferability for elective credit and does not guarantee articulation to meet a major or general education transfer requirement. Transferability status may require one or more years to establish, so local practice may call for the faculty member to indicate this intent on a proposed COR, but catalog descriptions should only be so modified when course transferability has been determined through formal articulation processes.

Field Trips, Required Materials, and Other Expenses

Field trips, required materials for the course, and other probable expenses should be listed in the catalog description. This practice alerts students to possible costs that may influence their decision to enroll in the course. Per Title 5 §59400(b), colleges may not charge a general materials fee if students do not walk away with a physical object or permanent access to some body of knowledge as they would with a book. While this listing can be fairly generic in the course description, it should be more specific in the overall COR.

College Catalog Course Description Checklist

The following is a checklist of items that should appear on all course outlines of record:

- Course number and title
- Status (degree applicable/non-degree applicable)
- A content or objective description
- Course type (lecture, lab, activity, special topics, etc.), contact hours, and units
- Prerequisites, corequisites, advisories, and other enrollment limitations
- Fulfillment of a major, area of emphasis, or GE requirement if appropriate
- Transferability
- Field trips or other potential requirements beyond normal class activities
- Required materials
- C-ID Number

OBJECTIVES

The objectives of a course are the primary components and skills leading to student achievement and the course's intended purpose. The objectives should specify these components and skills to ensure that all faculty delivering the course share a common understanding and can therefore enable students to achieve the intended student learning outcomes across all sections and terms in which the course is taught. Objectives should be written in complete sentences or comprehensive phrases using language that is discipline specific and demonstrates the level of rigor appropriate for the class.

The COR should demonstrate that the course meets the standards for level and intensity in both quantity and effort as appropriate for the number of units and hours assigned to the course. The faculty member designing the course will need to determine a reasonable time frame for most students entering at the requisite levels to acquire capabilities defined by each objective.

The format for each objective typically begins with the phrase "Upon completion of this course, the student will be able to… ." These items are sometimes referred to as "behavioral objectives." These objectives can be measured through a range of assessments, including the use of rubrics to measure performance quality in writing, computation, or other skills.

Course Objectives and Student Learning Outcomes

Course objectives state the concepts or skills faculty introduce to students in a course or program in order to prepare students to meet a student learning outcome (SLO). Objectives are the means, not the ends. Course SLOs are the intended abilities and knowledge students can demonstrate after successfully completing the course objectives. SLOs must be written in measurable or observable terms and as actions that a student will perform in order to display the skills necessary to meet the SLO.

For example, for an introductory swimming course, the course objectives might consist of all four competitive swimming strokes; the course SLOs will measure the student's ability to perform all four strokes. The following is an example of a course objective that supports an SLO for a swimming course:

> Course objective:
> Demonstrate proper breathing techniques and arm position for the backstroke.

> SLO:
> Swim the backstroke for at least ten yards.

In this example, a student can demonstrate the SLO only after completing the objective.

Another example might be as follows:

> Course objectives:

> Demonstrate proper breathing techniques and arm position for the backstroke.
> Demonstrate proper breathing techniques and arm position for the front crawl.
> Demonstrate proper breathing techniques and arm position for the breaststroke.
> Demonstrate proper breathing techniques and arm position for the butterfly.

> SLO:
> Swim all four strokes of the medley relay for 25 meters each within 3 minutes.

In this example, all four objectives provide the scaffolding of skills the students need to be able to demonstrate an SLO; the SLO synthesizes the content and skills learned by completing all the objectives.

Writing Objectives and the COR

When writing objectives for a new course, the author should begin with the end in mind. The purpose of the course in terms of what students should be able to do after completing the course should be expressed in the course SLOs. Once the author has determined the outcomes expected, he or she can then determine what concepts or formative skills must be learned before students can perform the outcomes. Hundreds of specific learning objectives might potentially be appropriate, but not every objective must be listed. The objectives can be distilled down to a manageable number, commonly no more than 20 for a typical one- to three-unit course and often fewer than ten that are based on the major areas of content and most important skills a student should learn. The key is grouping individual items into sets with shared commonalities. For example, a sociology course might have many detailed items for students to learn in the area of cross-cultural comparisons, but the collective statement in the objectives section might be "compare and contrast traditions and behaviors in a variety of cultures." A chemistry class might take two or three weeks to discuss the properties of the various states of matter, but the objective might be summarized as "research and diagram the properties of the states of matter, use appropriate equations to calculate their properties, and explain those properties

on the molecular level." In this last example, the statement is really a collection of objectives rather than a single objective and may be a potential SLO for the course; if it was modified to include how students would apply those objectives, it would be an SLO.

Critical Thinking in the Course Objectives

Degree-applicable credit courses require students to demonstrate critical thinking. The incorporation of critical thinking must be evident throughout the course outline but particularly in the objectives, methods of instruction, and methods of evaluation elements. Students must clearly be expected to think critically, be instructed in how to do so, and be held accountable for their performance; however, not all objectives need to reflect critical thinking. Critical thinking involves active higher cognitive processes which analyze, synthesize, and evaluate information. These activities contrast with more passive activities such as recognizing, describing, or understanding information. The manner in which the objectives section reflects critical thinking in the higher cognitive domains is by expressing the objectives using verb rubrics or a taxonomy of thinking and learning skills such as Bloom's Taxonomy. Simply listing such higher skills in the objectives is not sufficient; the COR must demonstrate that students are taught how to acquire these skills and must master them in order to pass the class in the sections regarding methods of instruction, assignments, and methods of evaluation.

For non-degree applicable credit courses, the requirement for critical thinking is different, but it still exists, and the same guidance still applies. The difference is that in these courses students are initially being taught how to think critically; in degree applicable courses, the expectation is that students are already able to think critically and are now improving their abilities. Because of this difference, the objectives in non-degree applicable courses may cover a narrower scope because students are in the process of learning effective ways to study and think critically. However, the objectives should prepare students for studying independently and must "include reading, writing assignments and homework" (see Title 5 §55002(b)2(C) Intensity—below).

Regulatory Requirements Reflected in your Objectives

Each of the standards listed below should be reflected in the group of objectives chosen for the course, but each objective does not need to meet all or any of these standards. For example, every objective need not target the critical thinking requirement. Thus, "list proper safety protocols for handling toxic fluids" may not meet the difficulty standard, but it is still an appropriate objective. However, the group of objectives as a whole should address all the standards. Additionally, the objectives should in some way pair in terms of need with the requisite entry skills if those skills are listed. A course objective that calls for a student to be able to work with differential equations should properly pair with the entry-level skills of Calculus I and Calculus II.

The following are regulatory standards, with their Title 5 citations, that must appear in the course objectives:

Prerequisites and Corequisites §55002 (a)(2)(D)

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 this article.

Intensity §55002(a)(2)(C) (Degree applicable credit)

The course treats subject matter with a scope and intensity that requires students to study independently outside of class time.

Difficulty §55002(a)(2)(F)

The coursework calls for critical thinking and the understanding and application of concepts determined by the curriculum committee to be at college level.

Level §55002(a)(2)(G)

The course requires learning skills and a vocabulary that the curriculum committee deems appropriate for a college course.

Intensity §55002(b)(2)(C) (Non-degree applicable credit)

The course provides instruction in critical thinking and generally treats subject matter with a scope and intensity that prepares students to study independently outside of class time and includes reading and writing assignments and homework. In particular, the assignments will be sufficiently rigorous that students successfully completing each such course or sequence of required courses, will have acquired the skills necessary to successfully complete degree-applicable work.

CONTENT

The course content section, also known as core content at some colleges, is commonly formatted as an outline. The content topics are typically arranged with major headings and minor subheadings or bulleted lists of elements that further define the major heading. The outline is detailed enough to fully convey the topics covered but not so lengthy that a quick scan cannot be used to ascertain the scope of the course. A page or two is fairly typical.

The content listed in the course outline is required to be covered by all faculty teaching the course unless it is marked as optional. However, the listed content does not limit instructors from going beyond the topics in the outline.

Major Headings and Sub Headings

Content is subject based, so it need not be written in terms of student capabilities or behavior. However, the major headings of content should be clearly relevant to the objectives. For example, if a content item major heading for an anthropology course were "osteology," this topic might be expanded upon in the subheadings in the following way:

Course Content

1. Osteology

    • Major bones of the human skeleton and the correct positions

    • Composition and shape classes of bone

    • Pathologies

    • Skeletal differences between males and females

    • Determining age from dental and skeletal cues

    • Advantages and constraints of bipedalism

Repeatability and Core Content

Except in very limited circumstances, the content of a course may not be designated as repeatable for credit. Title 5 §55041 states that the content of a course may only be designated as repeatable if the course meets one of the following conditions: repetition of the course is necessary to meet the major requirements of CSU or UC for the completion of a bachelor's degree, the course is designated as intercollegiate athletics as defined in §55000, or the course's requirements involve participation in intercollegiate academic or vocational competition as defined in §55000. Courses that are designated as repeatable should be indicated as such on the COR, as Title 5 §55041 requires that such designations be indicated in the college catalog.

Courses Related in Content (Formerly "Course Families")

Where repeatability is not applicable, local curriculum committees may designate course groupings for "active participatory courses" that are related in content where appropriate. Active participatory courses are those courses where individual study or group assignments are the basic means by which learning objectives are obtained. Courses that are related in content have similar primary educational activities in which skill levels or variations are separated into distinct courses with different student learning outcomes for each variation. Decisions regarding the grouping of courses related in content can be made locally by each college but should be recorded for purposes of organization and in some cases Title 5 compliance; therefore, an indication on the COR that a course is part of a grouping is good practice.

With very limited exceptions, students can only take each active participatory course once. In addition, Title 5 §55040 indicates that "each community college district . . . may not permit student enrollment in active participatory courses . . . in physical education, visual arts or performing arts that are related in content . . . more than four times for semester courses or six times for quarter courses. This limitation applies even if a student receives a substandard grade or "W" during one or more of the enrollments in such a course or petitions for repetition due to extenuating circumstances as provided in section 55045." If any of the courses within a grouping of courses related in content are marked as repeatable, each transcripted enrollment in a repeatable course counts as one of the four allowable experiences within the set. The limitation of four experiences in a grouping applies only to active participatory courses in physical education, visual arts, or performing arts. Because of the enrollment limitation, courses in these areas that are designated as part of a grouping of courses related in content may be indicated as such on the COR and in the college catalog in order to ensure that students are aware of the limitation.

Course groupings or sets should provide students with an opportunity to build their knowledge, skills, abilities, and fitness levels in physical activity courses within a set of discrete individual courses. The need to develop leveled or distinct courses should be founded on these principles and should be done to ensure programmatic needs are met when appropriate. Course content for each course in a course set must be significantly different in level, intensity, and other standards even though the courses are related in content, including level-specific course objectives and outcomes.

A variation on leveling is to create courses with a more specific focus within an area of emphasis, which allows students to have similar learning experiences that develop key skills but do so using significantly different content. For example, some colleges may divide a "painting" area of emphasis into oil, acrylic, and watercolor courses or separate out relief printmaking from intaglio, lithography, or screen-printing. Both curricular and pedagogical justifications exist for this approach. The primary concern with such an approach is that receiving institutions, UC and CSU in particular, typically do not divide the curriculum in this way. Most schools in the CSU or UC systems only require one or two courses in any given medium for major transfer preparation. Local faculty should work closely with their articulation officers to assess the potential impact of this approach on students preparing to transfer.

Local curriculum committees should be conservative in making decisions regarding sets of courses related in content and should avoid creating numerous overly specific sets that closely mirror each other's content. The definition of "courses that are related in content" is not intended to be so narrow that it becomes inhibiting or useless, but neither is it intended to allow colleges to proliferate levels and active participatory courses. More information regarding courses related in content can be found in the *Chancellor's Office Guidelines on Course Repetition* (2013).

Methods of Instruction

The Title 5 sub-section defining the course outline does not mandate a comprehensive list of instructional methods. Rather, the outline must "specify types or provide examples." Thus, faculty have the academic freedom to select instructional methods to best suit their individual teaching styles. The methodologies used by each instructor are to be consistent with, but not limited by, these types and examples. In all cases, the methods of instruction should be presented in a manner that reflects both integration with the stated objectives and a likelihood that they will lead to students achieving those objectives. A faculty member may also consider using the course student learning outcomes to identify methods of instruction, since those skills and abilities faculty will assess at the end of the course may be modeled through instructional methods.

In many cases, the environment in which the learning occurs may be described by listing potential methods of instruction the faculty have agreed are effective for the specific content, objectives, and outcomes. While any course should be crafted to accommodate for differences in setting, many courses such as lab courses rely heavily upon their environment as a critical element of the learning experience. However, this environment should be framed in the context of types and examples, such as "the student will conduct clinical patient evaluations in a hospital environment" versus "the student will evaluate live patients in the emergency room of St Mary's Hospital."

Delineating the methods of instruction tends to imply a description of what the instructor will be doing to facilitate learning. While such information may be included, the focus of the methods should be on describing the activities the students will be doing and experiences that lead to learning, not only with respect to the instructor but in some cases with respect to each other and with their environment. For example, what a student will do in a communication studies course's instructional component to interact as a presenter and as an active listener are learning elements that are part of the methods of instruction. The description of the methods of instruction clearly lays the groundwork for developing or refining the evaluation methods and criteria.

The requirement to "specify types or provide examples" is incorporated into the course outline by some colleges as a list of options to select, either by checking a box or choosing from a drop-down list. This approach does not fully meet all Title 5 requirements because the oversimplification of teaching methods to a menu of options does nothing to illustrate the methods for determining "whether the stated objectives have been met by students" and does not effectively cross validate or integrate the other course outline elements.

Examples of assignments and methods of instruction and evaluation must be appropriate to the stated objectives and be meaningful for assessing student learning outcomes. In particular, because the learning experiences must either include critical thinking or experiences leading to this capability, the methods of instruction must effectively teach critical thinking and the methods of evaluation must effectively evaluate students' mastery of critical thinking. The themes established by the objectives must be integrated into methods of instruction and evaluation. The following table shows examples of methods of instruction that support specific course objectives:

Examples of Course Objectives	Examples of Methods of Instruction
Interpret and compare dramatic texts as both written plays and in live performance, including works by a variety of playwrights which represent the influence of diversity such as of gender, cultural background, class, sexual preference, and historical period.	Performances of selected dramatic texts followed by instructor-guided interpretation and analysis.
Observe and analyze the various components of a theatrical performance.	Readings of dramatic texts by the instructor and students followed by instructor-guided interpretation.
Differentiate between the play as literature and the play as performance.	Attendance at required performances preceded by instructor-modeled performance review methods and followed by in-class and small group discussions.
Evaluate the effectiveness of theatrical techniques in performance.	Project group meetings in class to develop play interpretation project and group presentation.
Analyze the artistic, literary, and cultural perspectives of various playwrights, including, North American, South American, African, Asian, and European.	In-class and out-of-class video and audio presentations followed by instructor-guided interpretation, analysis, and comparison to live performances.
Analyze and evaluate live theatre as a dynamic art form in comparison to recorded performances in film and television.	Lecture presentations on the organization of theatrical companies followed by in-rehearsal and backstage visits at required performances.

These examples demonstrate that choosing a type or example of a method of instruction from a drop-down list misses an opportunity to provide more detailed expectations of instructional rigor for both faculty and students. Instead of a list of prescriptive options, the writing style is descriptive of each possible activity. Rather than just checking "lecture," the faculty member has described the complete interaction with the student in terms such as "readings of dramatic texts by the instructor and students followed by instructor-guided interpretation and analysis." Methods of instruction written this way for degree-applicable credit courses make clear that critical thinking and scholarship is expected of students at a collegiate level, taught to them in class, practiced in assignments, and evaluated as the basis for their grade in the class.

Methods of Evaluation and Course Grading Policies

As with methods of instruction, Title 5 does not mandate a comprehensive list of methods for evaluation; rather, the COR must again "specify types or provide examples." The methods used by the instructor are to be consistent with, but not limited by, these types and examples. In all cases, the methods of evaluation should be presented in a manner that reflects integration with the stated objectives and methods of instruction and demonstrates a likelihood that they will lead to students achieving those objectives.

Using Multiple Methods of Evaluation

Effective and accurate student evaluation is not a simple task nor one to be treated as an afterthought to the other outline elements. Given the diverse populations community colleges serve, multiple methods of evaluation are usually preferred. While knowledge of required material, as reflected in assignments and methods of evaluation, constitutes a significant portion of the evaluation, different types of courses as well as differing facilities lend themselves to various types of evaluation. For example, lab courses are often environments conducive to oral interviews or practical demonstrations of skills, whereas a large lecture hall with fixed seating is not, and the availability of each is impacted by available facilities and resources at the college.

Methods of Evaluation and Critical Thinking

Because learning experiences in college courses must either include critical thinking or experiences leading to this capability, methods of evaluation must effectively assess students' mastery of critical thinking. For this reason, the themes, concepts, and skills established by the objectives must be integrated into methods of evaluation, keeping in mind that difficulty standards for degree applicable credit, non-degree applicable credit, and noncredit courses vary significantly, particularly in terms of critical thinking.

The following table shows examples of methods of evaluation that support specific course objectives:

Examples of Course Objectives	Examples of Methods of Evaluation
Define and demonstrate an understanding of general theatre terminology.	Evaluation of written analyses for content, form, and application of dramatic performance review techniques.
Observe and analyze the various components of a theatrical performance.	Evaluation of contributions during class discussion.
Interpret and compare dramatic texts as both written plays and in live performance, including works by a variety of playwrights which represent the influence of diversity (such as of gender, cultural background, class, sexual preference, and historical period).	Evaluation of participation in and contributions to group projects.
Differentiate between the play as literature and the play as performance.	Evaluation of written criticisms for content, form, and application of critique methodology.
Evaluate the effectiveness of theatrical techniques in performance.	Evaluation of performance reviews for completeness, personal perspective, and application of performance review styles.
Examine the organization of theatrical companies and compare and contrast the roles of theatre personnel, e.g., producer, director, dramaturge, technical director, actors, choreographer, critic, artistic director, development staff, scenographer and designers, and house manager.	Evaluation of interpretations of live performances and dramatic texts for cultural context, contrasts in live and textual impact, and performance techniques.
Analyze and evaluate live theatre as a dynamic art form in comparison to recorded performances in film and television.	Evaluation of final written essay examination and occasional tests for content, terminology, knowledge of subject matter, and ability to compare and contrast types, origins, and presentation modes of dramatic material.

Attendance and Evaluation

Some courses and programs, including programs with outside agency certifications, have very strict attendance requirements. Therefore, students who fail to log a stipulated number of hours of attendance may be ineligible to receive certification for program completion. This requirement in turn obliges faculty to include attendance as a necessary component in evaluation.

On the whole, Title 5 emphasizes that attendance is not in itself a substantive basis for student evaluation. Title 5 §55002(a)(2)(A) states, "The grade is based on demonstrated proficiency in 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." Students must be assessed on their ability to demonstrate proficiency in meeting the course objectives. Attendance is not part of a course subject matter or a discipline specific skill and therefore may not be separately assessed as part of the course curriculum.

However, Title 5 §55002(a)(2)(B) states, "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 or performance criteria specified in the course outline." Since college credit units are calculated in part based on a given number of hours spent in class, students who miss an excessive amount of class time cannot be said to have fulfilled the course requirements and may be dropped from the course. The manner and criteria by which excessive absences are calculated is not stated in Title 5 and is therefore generally determined by local policy.

In addition, one can reasonably argue that non-attendance, particularly during periods of proficiency demonstration, is legitimate grounds for a reduced or failing evaluation. Because class participation is one of the ways in which students demonstrate their proficiency with class material, and students who have not attended class have therefore not participated in class discussion, many instructors include "attendance and participation" as a factor in determining a course grade. This aspect of the grading criteria cannot be used to override all others, but it can be factored into a grade, especially if the participation is in part demonstrated by students through the completion of specific in-class activities, assignments, and quizzes.

Finally, an instructor may feel that certain required topics, affects, or attitudes cannot be evaluated by typical assessment practices. An example is an aspect of professionalism, such as repeated tardiness or absences, which may need remediation through academic consequences. However, these factors should be given careful consideration and be well justified. In these cases, attendance requirements and the subsequent evaluation thereof should be clearly laid out in the appropriate section of the syllabus.

Assignments

Title 5 §55002(a)(3) requires assignments in the COR but does not mandate a comprehensive list, nor does it mandate the way in which those assignments are written. Rather, the outline must "specify types or provide examples." The assignments used by the instructor of record for a section of a course are to be consistent with but not limited by these types and examples. In all cases, the assignments

should be presented in a manner that reflects both integration with the stated objectives, appropriate rigor for the level and difficulty of the course, and a likelihood that the assignments will support students achieving the course objectives and the ability to perform the student learning outcomes.

Given the multiple audiences for a COR (students, instructors, articulation officers, university faculty), college faculty should discuss how assignments will be documented. Curriculum committees may consider whether a simplistic list of varieties of assignments rather than specific "types and examples" provides the various audiences of a COR with useful information or if a more stringent standard for writing examples of assignments is appropriate. For example, examples of assignments could be written similarly to an actual assignment prompt with the intended rigor of the course evident in the sample. When writing is required in a sample assignment, instructors should indicate expectations for the writing and the length of the assignment. Assignments may also be written to highlight skills and abilities listed in objectives. For example, a type of assignment could be "written assignments that show development of self-criticism." In any case, the assignment types and examples should be written to show the level of rigor for the course, especially when the course requires college-level work or is a course in a grouping of courses that are distinguished by a progression of rigor.

When writing an assignment description for a COR, faculty should include the purpose of the assignment, including articulation and applicability for C-ID. For example, rather than simply stating "group project," a theater faculty member could write, "Preparation of group projects in which major analytical questions are discussed and a major project designed around issues related to play interpretation in performance."

Other Considerations for Assignments

In order to best suit the needs or purposes of the audiences of a COR, a variety of considerations should be kept in mind. In some situations, optional and alternate assignment examples should be included to provide options that improve access to coursework for all students. For example, an alternate assignment may be allowed in lieu of a required field trip or a cost-bearing assignment such as theatre tickets in order to ensure equitable access to learning experiences among all students. In addition to examples of alternate assignments, CORs can contain examples of out-of-class assignments. If so, those examples must be sufficient to show independent work equal in rigor to the expected hours of independent study determined in the hours to units formula to meet the minimum study time hours of work per week beyond class time for each unit of credit. Examples of assignments might also include any supplemental reading beyond the required texts if the faculty author of the course sees a need to codify the material on the COR. Finally, while assignment examples are not required to be organized within the COR in the order they would normally be used in class, giving some thought to this practice can promote an implementation strategy that leads to a more effective learning experience.

The following table shows examples of assignments that provide appropriate evaluation to support specific course objectives:

Objective	Assignments Written as Types	Assignments Written as Examples
Define and demonstrate an understanding of general theatre terminology.	Participation in class discussions about plays.	Working with several classmates in a group, review a list of theater terms and provide a two-to-three sentence definition of each.
Interpret and compare dramatic texts as both written plays and in live performance, including works by a variety of playwrights which represent the influence of diversity (such as of gender, cultural background, class, sexual orientation, and historical period).	Textual analysis in discussion and writing and required study of assigned dramatic texts, including works representative of diverse gender, ethnic, and global perspectives.	Read August Wilson's *Fences* and write a three-page essay on the concept of masculinity in the play.
Observe and analyze the various components of a theatrical performance.	Written analysis of several live performances of amateur and professional theatres presented during the academic term.	Write a three-page analysis of a local theater production which focuses on the elements of lighting and blocking.
Observe and analyze the various components of a theatrical performance.	Preparation of group projects in which major analytical questions are discussed and a major project designed around issues related to play interpretation in performance.	The class will be divided up into groups of 4-6 people. As a group, you will become theatre personnel and will perform a series of functions that every theatre must have, including choosing a play to produce and doing all that needs be done in order to produce it.
Differentiate between the play as literature and the play as performance.	Listening and viewing. Study of plays on videotape (DVD) and audiotape. Preparation for participation in daily analysis of texts and performances by watching video performances of a play currently being read by the class.	Watch Hamlet's "To Be or Not To Be" soliloquy from the 2000 Ethan Hawke version of *Hamlet* and write a one-page essay describing how the stage direction found in Shakespeare's text is realized in the film.
Evaluate the effectiveness of theatrical techniques in performance.	Interpretive analyses of published critical reviews of performances and plays.	Read the excerpt provided from the "Writing for the Stage" chapter of Vaclav Havel's *Disturbing the Peace* and discuss his opinions on his own technical achievements and failures.

Required Texts And Other Instructional Materials

Instructional materials have evolved with technology, including required texts and other materials in the classroom to support the curriculum. While Title 5 §55002 does not require that materials be listed on a COR, it does indicate that "resource materials" are a criterion that must be considered by a curriculum committee prior to recommendation for approval. Title 5 §59400(b) and (c) specify regulations for electronic materials that should be considered when placing required materials on a COR. Fully electronic materials should comply with all 508 compliance rules for disabled student access.

Materials Other than Books

While Title 5 does not directly address other required learning materials beyond reading assignments, the required texts and other materials section of the COR should also include any required software, supplies, or other equipment such as a sports item, lab equipment, tools, art materials, or anything else the student must have to participate effectively in the course.

Required Materials and Articulation

Primary textbooks and resource materials specified on a COR play a central role in the articulation of a course. Any required materials should be clearly recognized by faculty in the discipline at other institutions as a major work that presents the fundamental theories and practices of the subject. Required texts can also identify the rigor of a course, especially in courses within a program sequence or a grouping of courses.

The currency of textbooks is an important consideration for articulation and can vary greatly from subject to subject. Some courses may use reference manuals that are long standing icons of their respective fields. On the other end of the spectrum, UC and CSU generally require texts that are no more than five to seven years old. Some C-ID descriptors require certain types of materials or texts as well. Explanations should be provided when texts are more than five years old. In STEM disciplines or any course that uses a required lab manual created by faculty, faculty should include the manual on the COR and they should be encouraged to update it regularly; the same is true for any kind of electronic materials required in either a face to face or online course.

Materials for Courses Officered via Distance Education

For courses that are available for distance education instruction, educational materials appropriate for that teaching modality should also be included on the official COR either as required or as options for instructors. In addition, in both face-to-face courses and distance education courses faculty may choose to use digital materials that are available at no or low cost to students, often referred to as open educational resources (OER). OER are freely accessible, openly licensed documents and media that are useful for teaching, learning, and assessing as well as for research purposes. OER materials should be vetted by faculty in the discipline prior to adoption as required materials. Official statements from both CSU and UC articulation officers are forthcoming regarding the acceptance of OER textbooks for articulation, but faculty should ensure that the materials they choose will allow for transferability.

DETERMINING LEVELS BELOW TRANSFER AND CB 21 RUBRICS

Basic skills status is an important discussion that must take place on each campus among discipline faculty and administrators. Curriculum committees should work with discipline faculty members to consider the college mission and the courses that make up their degrees. The courses must be compliant with Title 5, which indicates that anything used for a degree or transfer cannot be coded as basic skills.

Basic Skills and Title 5

While Title 5 does not allow basic skills courses to be coded as degree applicable, degree applicable courses can be below transfer. Title 5 §55062 states that courses may be degree applicable if one of the following items applies:

- 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.

- Courses that apply to the major or area of emphasis in non-baccalaureate career technical fields.

- English composition or reading courses not more than one level below the first transfer- level course. Each student may count only one such course below transfer level for credit toward the associate degree, (reading courses which also satisfy the requirements of subdivision (a) are not subject to this limit.) English as a Second Language (ESL) courses which teach composition or reading skills are not considered to be English composition or reading courses for purposes of this subdivision."

- All mathematics courses above and including Elementary Algebra.

- 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 subdivisions (c) and (d) above.

Local curriculum committees should be involved with the determination of what constitutes a basic skills course and make recommendations regarding basic skills status. While colleges may approach this conversation differently depending on their reasoning, alignment with existing degrees, and student populations, decisions about the parameters of basic skills courses and their designation should be under the auspices of the curriculum committee. While no universally accepted answers or formulas exist, a course cannot be considered basic skills if it is degree applicable, even if it is pre-transfer.

Pre-transfer Courses and Degree Applicability

Some colleges use pre-transfer courses for degrees and certificates that are part of career technical programs or for curriculum where transfer-level math or English is not considered standard. In such cases, even though a course is considered pre-transfer, it cannot be coded as basic skills if it is used

to complete degree requirements. Title 5 allows one course below transfer in English and reading to be degree applicable and two courses below transfer in math to be degree applicable (intermediate algebra and algebra). Courses outside of the major and general education patterns can also count towards the 60 semester units required for the associates degree.

Graduation requirements in English are transfer level. If a course in English is offered for credit and is one level below transfer, it can be degree applicable, but it is not adequate for degree completion. The course units can count towards the degree, but a student must complete transfer-level English to meet graduation requirements.

Aligning Basic Skills Curriculum with the CB 21 Rubrics

In determining levels below transfer, whether pre-transfer or basic skills, curriculum committees should work with discipline faculty to align a course with the CB 21 rubrics. The CB 21 rubrics are credit rubrics adopted by California community colleges to provide a matrix for comparing courses across the system and reporting student progress through basic skills. These rubrics are not comprehensive standards nor grading rubrics but rather are outcomes that should be evident at each level described. The rubrics have been universally defined by California community college experts based on research and nation-wide scans. The noncredit rubrics are defined to align with credit outcomes at each level. Importantly, the data element dictionary from the Chancellor's Office for CB 21 does not refer to "basic skills"; courses coded with CB 21 are courses prior to transfer. Assigning a CB 21 level does not always indicate that the course is basic skills. Some courses prior to transfer are degree applicable, and others are basic skills. The new CB 21 identifies those courses in a sequence that lead to transferable reading, ESL, English and math courses.

If a college has ongoing difficulty in determining the level of a course below transfer, the curriculum committee should work with discipline faculty to analyze existing prerequisites or advisories to aid in the determination of where a course falls on the CB 21 rubric levels. In addition, if the rubrics raise questions about existing prerequisites or advisories, discipline faculty may need to examine data concerning student success along the pathway and re-evaluate the current curricular pathways.

Determining College Level Coursework

While Title 5 §55062 speaks directly to the courses below transfer that may be included as degree applicable, colleges are permitted to decide which courses they feel are college level. Title 5 §55002(b)(1) lists other types of courses that may be non-degree applicable credit courses:

- ◆ Courses designed to enable students to succeed in degree applicable credit courses (including, but not limited to, college orientation and guidance courses, and discipline-specific preparatory courses such as biology, history, or electronics) that integrate basic skills instruction throughout and assign grades partly upon the demonstrated mastery of those skills;

- Precollegiate career technical preparation courses designed to provide foundational skills for students preparing for entry into degree applicable credit career technical courses or programs;

- Essential career technical instruction for which meeting the standards of degree applicable credit courses is neither necessary nor required.

ELEMENTS THAT APPLY TO NONCREDIT COURSES

General Notes

Unlike credit courses, which may cover a wide array of disciplines and topics, noncredit instruction is limited to nine areas stipulated by Education Code §84757. Given these restrictions, a faculty member must ask at the onset of creating a course outline of record whether the credit or noncredit option best supports student access and success. One local question that needs to be decided is whether the COR should be the same for credit and noncredit courses. Some of the elements listed in the previous section, "Elements That Apply to Credit Courses," are in part repeated in the following pages, although these elements may not be identical. However, a faculty member considering the creation of a new course may wish to review both sections for additional ideas and to develop a broader context of curriculum development.

Only one standard for approval is mandated by Title 5 for noncredit courses, (§55002(c)(1)). This standard places the burden of rigor upon the local curriculum committee to determine that course elements detailed herein are appropriate for the intended students.

As with credit instruction, SLOs can act as a central component in the development of many elements of noncredit courses. Per the accreditation standards, assessment data collected by faculty on outcomes, along with other information, must be reviewed and used to create action plans intended to improve teaching practices and student success at the course and program levels. Many colleges use a data mapping process that links course student learning outcomes (CSLOs) found on the COR to program student learning outcomes (PSLOs) in order that the data collected at the CSLO level provides data for PSLO assessment. Given the importance of these links between the CSLOs and the PSLOs, faculty should begin course development and review of objectives and other elements of the COR with an analysis of how the CSLOs support student attainment of the PSLOs for those programs that include the course being reviewed. This process ensures that students taking the courses and performing the SLOs of those courses will also be able to perform the PSLOs for their programs.

Contact Hours

For noncredit curriculum, the expected total contact hours as used in student attendance reporting must be contained within the COR. While noncredit courses may provide for coursework outside of class time, it is not required; therefore, the contact hours listed on the COR for a noncredit class may encompass all of the course activities and learning time.

Catalog Description

The purpose of the catalog description is to convey the content of the course in a brief and concise manner. Because the catalog description is the primary way in which course information is disseminated, it should contain all essential information about the course. Noncredit courses are designed to meet the needs of specific groups or to achieve a specified objective. While all community colleges courses are open to all students, a course designed for a particular population should be advertised with that population in mind. "Childcare Skills for Parents," for example, would be open to all but would be clearly described in the catalog as a course designed to meet the needs of this specific population.

Noncredit courses can play a prominent role in programs to demonstrate competency and completion; therefore, students need information about the courses for planning their programs, as do counseling faculty for advising them. Faculty, staff, and students at other colleges use catalog descriptions to evaluate the content of the courses that incoming students have taken at the originating institution. Outside reviewers who base their conclusions on the information printed in the catalog can include college accreditation visitation teams, matriculation site visitors, individual program accreditation reviewers, or credit faculty considering the allowance of a credit-by-exam.

Important Course Content and Educational Planning

The heart of the catalog description is the summary of course content. This information should be thorough enough to establish the comparability of the course to those at other colleges and to convey the role of the course in the curriculum as well as to distinguish it from other courses at the college. It should be brief enough to encourage a quick read and avoid confusing students with unnecessary detail. To save space in a catalog, many colleges use phrases rather than complete sentences. In writing descriptions for noncredit courses that may act as development for or prerequisites to credit courses, colleges may consider the catalog descriptions for the common receiving programs or institutions in order to clarify a logical pathway for students intending to pursue this route.

The catalog description of a noncredit course may include a statement about the students for which the course is intended in order to help students with educational planning. For example, the description might include the language "first course in the auto collision repair program," "intended for students in health and safety education programs," or "prepares students to successfully qualify for employment in the XYZ industry." In addition, descriptions may include whether the course articulates or leads to credit coursework if such opportunities exist. Catalog descriptions should also list entry advisories and the courses for which the noncredit course provides preparation.

Schedule Flexibility in the Description

Noncredit courses are often offered in short-term or flexible formats such as open entry/open exit. The catalog description should describe term lengths and any attendance requirements that result from this scheduling. Pedagogical, logistical, or scheduling reasons may exist for which students would need to repeat a course or take two sections simultaneously. Since this flexibility can greatly benefit student

success, the faculty member writing the course outline should consider delineating those options in the catalog description. Many colleges include the scheduling parameters or terms in which a course is intended to be offered, such as "summer only," or "weekend program."

Course Expenses and Required Materials

Field trips, required materials for the course, and other probable expenses should be listed in the catalog description. This practice alerts students to possible costs that may influence their decision to enroll in a course. Under current regulation, colleges may not charge a general materials fee if students do not walk away with a physical object or permanent access to some body of knowledge as they would with a book and may not require online materials to which a student does not have access for a minimum period after the conclusion of the course.

Examples of Noncredit Course Descriptions

Several examples follow that illustrate some of the important elements of catalog descriptions:

Example #1: This example deals with the first course in a two course sequence. It describes the course, the intended students, and what the students' expected entry-level skills should be. It also includes a general note that the students will be using a computer as a part of the course.

Beginning Citizenship

Advisory ESL: Intermediate 1

> This first class focuses on the development of spoken English skills and general knowledge of American History and United States Government. It prepares students for passing the written test to become a citizen of the United States. In this class, you will learn the following:
>
> - U.S. History and government as they apply to the citizenship examination process.
> - Basic skills and techniques used in oral interviews.
> - The reading and writing skills required for testing to become a citizen.
> - How to complete and submit the application for citizenship.
> - What additional documentation you will need.
> - (Note: students will be required to use computer-based testing to practice citizenship testing in this class. All computers and testing materials will be provided.)

Example #2: This example of a catalog description shows that the course is at an intermediate level and describes a required book purchase as well as the basic objectives of the course. If a noncredit course includes any required materials or equipment, the same guidance offered for credit courses earlier in this paper also applies to noncredit.

Citizenship Interview

Advisory ESL: Intermediate 2

This class follows the Beginning Citizenship class. It is designed to develop student interview skills for those who are waiting for their oral interview. Students should have at least an intermediate level of English reading, writing, and speaking skills. In this class, students will attempt the following:

- Practice interview questions related to the required documentation and forms.
- Practice interview questions related to the history and government of the U.S.
- Develop English dialog skills specific to the testing process.
- (Note: students will be required to use computer-based testing to practice citizenship testing in this class. All computers and testing materials will be provided.)

Example #3: This example is very clear regarding the expectations for incoming students and what the students should expect when taking this class. It specifically describes unusual logistical parameters while encouraging those who might be impacted by these factors.

Basic Math Skills

This beginning course is intended to cover basic arithmetic concepts beginning with the basic operations of addition, subtraction, multiplication, and division of whole numbers, fractions, decimals, and percentages. This course may be used for five credits in the High School Diploma program under subject (E) Mathematics. Required textbook may be purchased at the campus bookstore.

Example #4: The following catalog directions are very clear regarding the preferred campus for placement and registration. This point is particularly important in this case, because the intended student may not be the primary reader of this information.

English as a Second Language (ESL) Literacy

Advisory: Literate in native spoken language, semi-literate in native written language.

Students will be oriented to the classroom environment and the ESL learning processes. Class emphasis will be on oral English and development of introductory reading and writing skills. Class will take guided walks around campus to develop vocabulary and beginning conversational skills. Mobility challenged students are welcome.

Note: All ESL students please contact the campus counseling office at the following numbers or locations for each site. Plan to schedule an appointment to speak with a counseling representative for placement assessment and class registration. All students may speak

directly to a counseling representative by walking in to the counseling office of any campus during the hours of 9:00 a.m. - 4:00 p.m. Monday through Friday.

These examples illustrate the importance of providing, in the briefest form, the necessary information for students to plan for and meet their educational needs. The catalog must be clear and direct about both fiscal and logistical impositions any course may have.

Requisites

Requisites and advisories for noncredit should follow the same rules as those for credit courses, but Title 5 §55002 places no requirements around the establishment of them in noncredit instruction. However, the Title 5 section on requisites and advisories, §55003, does not differentiate between credit and noncredit courses. The process and need for developing and implementing requisites applies to all courses. In general, the purpose should be to provide either a requisite or some elementary guidance with a strong recommendation to seek counseling advisory services. The noncredit course faculty author should consult with the curriculum chair or other local resource to determine local policy. If local policy allows for requisites on noncredit courses, the faculty member should review the guidelines for prerequisite, corequisites and advisories.

College Catalog Course Description Checklist for Noncredit

The following elements must be included in the catalog course description for noncredit courses:

- Course number and title
- Status (noncredit versus credit or others)
- Content description
- Course type (lecture, lab, activity, special topics, etc.) and contact hours
- Prerequisites, corequisites, advisories, and other enrollment limitations
- Inclusion as an aspect of a certificate of completion or competency or high school graduation requirements
- Information on articulation or preparation for credit coursework
- Field trips or other potential requirements beyond normal class activities

The course description in the class schedule is generally an abbreviated version of that in the catalog and has no specific requirements under Title 5 regulation.

OBJECTIVES

The purpose of the objectives section on a noncredit course outline of record is to convey the primary components leading to student achievement of the course's intent and demonstration of the course's student learning outcomes. The objectives should highlight these components to ensure that course

delivery leads students to achieve the intended learning results and should bring to the forefront what must be focused on by any faculty member delivering the course. The definition of objectives and the distinction between objectives and student learning outcomes in noncredit are the same as those that were explained for credit courses earlier in this paper.

The format for each objective typically begins with the phrase "Upon completion of this course, the student will be able to…." These items are sometimes referred to as "behavioral objectives." The hundreds of possible learning objectives do not have to be so thoroughly documented that each one is listed. The objectives can be distilled down to a manageable number, commonly no more than twenty and often less than ten. The key is grouping individual items into sets that share commonalities. For example, a citizenship course might have many detailed items for students to learn in the area of cross-cultural comparisons, but the collective statement in the objectives section might be "become familiar with traditions and behaviors in a variety of cultures." An automotive class might take two or three weeks to discuss the processes for servicing fluids on a vehicle, but the combined learning objective might be summarized as "look up, print out, and complete a 3,000 mile service checklist for a late model automobile." Each of these statements is really a collection of objectives rather than a single objective, and the focus highlights a level of learning that is appropriate to the skills being developed.

Unlike in credit courses, students enrolled in noncredit courses are not required to demonstrate or be assessed on critical thinking, and noncredit courses are not to prepare students directly for using skills in the cognitive levels normally associated with critical thinking. However, in some cases course objectives and outcomes may require that students demonstrate higher cognitive levels if the students are to be considered successful. While a noncredit student may not be required to achieve a significant mastery of critical thinking in one course, the groundwork for future noncredit and credit courses should be laid out such that if the students continue to practice, experiment, and learn, they will eventually become such a master. When reviewing the specific learning items and writing collective objective statements, faculty should consider the cognitive levels expected of students in each area.

CONTENT

The format used for the course content section of a COR is commonly that of an outline. The topics are typically arranged with major and minor headings. The outline is detailed enough to fully convey the topics covered but not so lengthy that a quick scan cannot be used to ascertain the scope of the course. A page or two is fairly typical.

Content listed in the course outline is required to be covered by all faculty teaching the course unless some aspects are marked as optional. However, the listed content does not limit instructors from going beyond the topics in the outline.

Content is subject based, so it need not be expressed in terms of student capabilities or behavior. However, the content should be obviously relevant to the objectives. If, for example, a content item for an auto body and painting course were "art forms and colors," the item might appropriately be expanded upon to read, "Stylistic art forms and color considerations—relative to historical and current automobile designs." This more detailed description would help to clarify the actual need for this aspect of the content.

Career Development and College Preparation (CDCP)

The enactment of the Community College Funding Legislation SB 361 in 2006 established the Career Development and College Preparation (CDCP) Program. Additional changes to funding through SB 860 in 2014 allowed for an expansion of this program. CDCP certificates can be offered in several areas of study. Colleges may offer noncredit programs of two or more courses to prepare students for employment or to be successful in college-level credit coursework.

Noncredit courses offered in the four distinct instructional domains of English as a Second Language (ESL), Elementary and Secondary Basic Skills, Short-term Vocational, and Workforce Preparation are eligible for enhanced funding when sequenced to lead to a Chancellor's Office approved certificate of completion or certificate of competency, in accordance with the provisions of the California Education Code §84760.5 governing Career Development and College Preparation (CDCP) programs.

METHODS OF INSTRUCTION

As with credit courses, Title 5 §55002(c)(2) requires the COR to specify instructional methods but does not mandate a comprehensive list of instructional methods. Rather, the COR must "specify types or provide examples." Thus, individual faculty members have the freedom to select instructional methods to best suit their teaching styles and support student success. The methodologies used by each instructor are to be consistent with but not limited by the types and examples of instructional activity included on a COR. In all cases, the methods of instruction should be presented in a manner that reflects both integration with the stated objectives and a likelihood that they will lead to students achieving those objectives and performing the SLO. Additionally, since noncredit courses focus more on skill building than the accumulation of units toward an award, they enjoy more flexibility in scheduling through options such as variable unit and open-entry/open-exit courses, and instructional methods on a COR should be equally flexible. Methods of instruction should also reflect an awareness of the various levels of preparedness students bring to a course, since many noncredit classes do not have prerequisites and are not part of a sequence of courses.

In many cases, the environment in which learning occurs needs to be described. While any course should be crafted to be as flexible as possible to accommodate differences in setting, many courses, such as lab courses, rely heavily upon their environment as a critical element of the learning experience. However, this environment should be framed in the context of flexible examples such as "The student will learn by demonstration and repetition to select the proper tools needed to complete the assigned task" rather than "The student will learn by demonstration and repetition to properly choose a #2 Phillips screwdriver, a 4 oz. ball peen hammer, and a pair of right-cutting tin snips to complete the assigned task."

Delineating methods of instruction tends to imply a description of what the instructor will be doing to cause learning. While such information may be included, the focus of the methods should be on describing what the students will be doing and experiencing, not only with respect to the instructor but in some cases with respect to each other and their environment. For example, describing what an ESL student will do in an instructional component about verbal dialog, to interact as a presenter and

as a listener, involves learning elements that are the methods of instruction, and such a description lays clear groundwork for developing or refining the evaluation criteria.

The following are examples of instructional methods that might be included on a COR and that are indicative of rigor and awareness of the various levels of preparedness and the flexible scheduling of a course:

Objective	Method of Instruction
Repair various types and grades of damaged sheet metal back to paint grade quality using common shop-hand tools.	Instructor will demonstrate the proper techniques of stretching and shrinking sheet metals for annealing and cold-working sheet metals. Students will practice and develop these skills using common shop-hand tools.
Define and demonstrate an understanding of U.S. history as it pertains to citizenship.	Students will review various in-class videos specific to this objective and will participate in in-class discussions prior to reviewing and completing the course workbook un the segment pertaining to U.S. History.
Define and demonstrate an understanding of the proper methods to safely secure a household from potential dangers to children under the age of ten.	In-class lecture and videos defining in-home safety hazards for children, after which students will complete in-class participation activities designed to promote a discussion about student experiences growing up around in-home hazards.
Develop a balanced and nutritious weekly menu and properly prepare and serve common nutritious meals in a safe and sanitary manner.	Lecture and reading assignments to develop a general understanding of basic human nutritional requirements, followed by a practical exercise in researching food costs among various food groups and across generic versus named-brand sources.
Develop a vocabulary of words commonly used in the field of child development along with a comprehensive understanding of the word usage and the ability to effectively pronounce and enunciate the learned vocabulary.	Introductory lecture followed by unlimited self-paced use of audio and video recordings coupled with numerous in-class language development practice/participation sessions.
Perform elementary arithmetic calculations within workplace scenarios such as properly counting back change or preparing a service order tabulation for a cost estimate.	Introductory lecture coupled with workbook practice sessions to develop calculation skills, followed by review of scenario videos demonstrating proper customer communication and resolution practices.
Recognize and identify various types of normal and abnormal behavior or symptoms in children and determine a proper course of action if such is warranted.	In-class review of several international documentaries of pandemic exposure of children to various unchecked health disasters, followed by in-class discussions and further lecture or reading about symptomology of common childhood ailments.

METHODS OF EVALUATION AND ATTENDANCE

Title 5 does not mandate a comprehensive list of methods for evaluation; rather, the COR must "specify types or provide examples." The methodologies used by each instructor are to be consistent with but not limited by these types and examples. In all cases, the methods of evaluation should be presented in a manner that reflects integration with the stated objectives and methods of instruction

and that demonstrates a likelihood that they will lead to students achieving the course objectives and successfully meeting the course SLO.

Title 5 allows for the awarding of grades in noncredit courses, including courses that are a part of a high school diploma or may be accepted for credit by high schools. The grading policy for noncredit courses is defined in Title 5 §55021(c) and authorizes grading in noncredit if local policy allows it. However, in summer of 2016 the Board of Governors approved a change to Title 5 §55023 to allow an additional grading option for noncredit courses. This change provides the "Satisfactory Progress" (SP) grade as an option for colleges with noncredit courses, but its use is not mandatory. The options for grading thus include Pass (P), No Pass (NP), and Satisfactory Progress (SP).

The requirement for integrated objectives, methods of instruction, and methods of evaluation is no less challenging for noncredit than for credit courses due to the reactions of many noncredit students to an NP grade. Having failed is often seen not as an occasion to apply oneself and try harder but rather as a justification for not proceeding any further. Thus, a primary goal of evaluation in noncredit should be to help students learn how to be successful in spite of a single performance or sequence of performances that may be less than satisfactory.

The following table provides examples of course objectives in a noncredit course and appropriate methods of evaluation:

Objectives	Method of Evaluation
Repair various types and grades of damaged sheet metal back to paint grade quality using common shop-hand tools.	Evaluation of various practice pieces culminating in a color painting of the final project piece for subsequent evaluation and determination of flaws and their cause.
Define and demonstrate an understanding of U.S. history as it pertains to citizenship.	Students review, restudy, and reattempt workbook questions until responding successfully to a certain percentage of the questions.
Define and demonstrate an understanding of the proper methods to safely secure a household from potential dangers to children under the age of ten.	In-class evaluations by instructor and student participation in feedback sessions to provide a diverse spectrum of safety examples, concerns, and solutions.
Develop a balanced and nutritious weekly menu and properly prepare and serve common nutritious meals in a safe and sanitary manner.	Students implement the developed weekly menu for one week and self-evaluate using provided forms to report results in a class-reporting session.
Develop a vocabulary of words commonly used in the field of XXX along with a comprehensive understanding of the word usage and the ability to effectively pronounce and enunciate the learned vocabulary.	Evaluation of in-class participation as discourse becomes more sophisticated throughout the term of the course coupled to scenario practice with audio recordings for feedback and guided self-evaluation.
Perform elementary arithmetic calculations within workplace scenarios such as properly counting back change or preparing a service order tabulation for a cost estimate.	Students successfully complete three differing types of estimate and invoice preparations and transact them with the instructor or aide acting as the customer.
Recognize and identify various types of normal and abnormal behavior or symptoms in children and determine a proper course of action if such is warranted.	Reviewing videos or scenarios of children in normal settings. Students will correctly identify at least four abnormal conditions.

Attendance

Since noncredit courses by definition do not carry unit amounts, attendance is crucial to determining methods of evaluation. Therefore, student attendance requirements should be included in the COR. Per Title 5 §55002 (c)(2), the number of required student contact hours must be indicated on a noncredit COR and recorded by the instructor.

In regard to attendance for open entry/open exit courses, Title 5 §58164 (e) states, "The maximum number of hours a student may be enrolled in an open entry/open exit course shall be determined by the curriculum committee established pursuant to §55002 based on the maximum time reasonably needed to achieve the educational objectives of the course." The maximum hours for the course should be included on the COR.

Because some programs with outside agency certifications have very strict attendance requirements, students who fail to complete a stipulated number of hours of attendance are ineligible to receive certification for program completion. This situation in turn obliges faculty to include attendance as a necessary component in evaluation. In these cases, attendance requirements and the subsequent evaluation thereof should be clearly laid out in the methods of evaluation section.

For many course objectives, one might have difficulty demonstrating that attendance is evidence of proficiency. On the other hand, one could reasonably argue that non-attendance, particularly during periods of proficiency demonstration, is legitimate grounds for a reduced or failing evaluation. Additionally, an instructor may feel that certain required topics, affects, or attitudes cannot be evaluated by typical assessment practices. An example is an aspect of professionalism such as repeated tardiness or absences, which may need remediation through academic consequences. However, these factors should be given careful consideration and be well justified. In these cases, attendance requirements and the subsequent evaluation thereof should be clearly laid out in the appropriate section of the syllabus.

ASSIGNMENTS AND OTHER ACTIVITIES

Title 5 §55002 establishes the requirement for assignments in the COR but does not mandate a comprehensive list; rather, the outline must "specify types or provide examples." The assignments used by each instructor are to be consistent with but not limited by these types and examples. In all cases, the assignments should be presented in a manner that reflects both integration with the stated course objectives and a likelihood that they will lead to students achieving those objectives and the course SLO.

For many areas of study, the organization or sequence of learning is very important. While the assignments example are not required to be sequentially organized in the COR, such a practice can promote an implementation that leads to a more effective learning experience.

The purpose of each assignment should be connected to one or more objectives. In some cases, particularly at the lower cognitive levels, the objective and assignment appear identical or very similar.

For example, in an integrated COR the objective of being able to child-proof a house is in part learned by doing just that, i.e., making a house safe for children. A course may have several student performance expectations, and these expectations should be emphasized in class, practiced through various assignments, and evaluated as the basis for any feedback or potential certification.

The following table provides examples of courses objectives and appropriate assignments:

Objectives	Assignments
Repair various types and grades of damaged sheet metal back to paint grade quality using common shop-hand tools.	Using common shop-hand tools, the student will repair at least three different types or grades of damaged sheet metal back to paint grade quality.
Define and demonstrate an understanding of U.S. history as it pertains to citizenship.	The student will read and properly respond to questions in a course workbook in the subject area of U.S. history.
Define and demonstrate an understanding of the proper methods to safely secure a household from potential dangers to children under the age of ten.	Using a simulation scenario, the student will properly secure a household from potential dangers to children under the age of ten.
Develop a balanced and nutritious weekly menu and properly prepare and serve common nutritious meals in a safe and sanitary manner.	The student will develop a balanced and nutritious weekly menu within a specific budget that will include predefined nutrition parameters as assigned.
Develop a vocabulary of words commonly used in the field of XXX along with a comprehensive understanding of the word usage and the ability to effectively pronounce and enunciate the learned vocabulary.	Using the XXX vocabulary workbook, the student will participate in in-class narrations of words, sentences, and paragraphs contained within the lesson workbook.
Perform elementary arithmetic calculations within workplace scenarios such as properly counting back change or preparing a service order tabulation for a cost estimate.	Utilizing in-class scenarios, the students will prepare an invoice and estimate, properly tabulated, and will transact payment and correctly provide change to a customer.
Recognize and identify various types of normal and abnormal behavior or symptoms in children and determine a proper course of action if such is warranted.	Utilizing online research materials, the student will produce written descriptions of the symptoms of five common childhood ailments to include the flu, mumps and the measles.

RELEVANT ADDITIONAL COURSE OUTLINE ELEMENTS AND CONSIDERATIONS

Modality Of Instruction Distance Education

Per Title 5 §55206, in order to offer a section of a course fully online or in a hybrid format, a separate review process is required to ensure that the course taught at a distance follows the COR and to ensure quality through regular and effective instructor-student contact as established in Title 5 § 55204. This separate approval is not required to appear on the COR. Typically, the separate review is achieved through the use of a distance education addendum that establishes local criteria for authorizing a course to be taught using a distance education modality. However, a college that wishes to note approval of an addendum on the official COR may include distance education as an option among the methods of instruction on the COR. Including this note on a COR may be important, as the COR is the basis for articulation and all sections of a given course must achieve the same objectives regardless of instructional modality.

COURSE CALENDAR AND MAXIMUM CLASS SIZE

Title 5 is silent regarding both session or term lengths and maximum class enrollments or class sizes on the COR. Both of these elements are academic and professional matters; however, both are often issues that are negotiated between faculty collective bargaining units and the college administration.

Determining Appropriateness of Short-Term Offerings

Discipline expertise is the single most qualified source to appropriately determine whether offering a course in a shorter term or session is academically viable. While in most bargaining agreements the administration has the right of assignment and creates the schedule, curriculum committees should determine whether a course can be offered responsibly during a short session or term and make that determination known to the administration and to the local bargaining unit as academic calendars and terms or sessions are negotiated. ASCCC Resolution 9.09 S06 states that "when a course of three or more units is offered in a format of less than six (6) weeks, the course must be reviewed by the local curriculum committee prior to it being scheduled." Curriculum committees should consult with discipline faculty in monitoring practices regarding shorter terms in order to diligently maintain high standards of rigor and quality. One way to do so would be to create formal policies on short-term course offerings at the college.

If a course is to be considered for a six or fewer week format such as in a summer session, or an even shorter time frame in a winter intersession, faculty should determine whether the course can be offered in a way that upholds standards and rigor. Faculty can consider the impact on a typical term's workload or a student's course load to determine whether teaching the course in a shortened time frame is academically feasible. For example, a five-unit course taught in a four-week format is equal to 133% of a faculty's full-time load in most districts where a full load equals 15 class time hours per week in a traditional semester and would represent anywhere from a 133% to 150% load for the student. Under those terms, faculty can ascertain whether instructional quality is maintained for each and every student within that class regardless of any delivery constraints, including the viability of the total number of student learning hours during the shortened term. When making this determination, faculty should ask whether the shorter term would affect the opportunity for student success and the pedagogy of the course irrespective of who teaches the course or what types of services may or may not be available given the drastically shorter term.

In many districts the calendar itself is a negotiated item. Given the impact on course quality and the parameters set in a COR to ensure that quality, academic senate representatives and bargaining unit representatives preparing for such negotiations should engage in discussions related to the length of terms that include sound pedagogical parameters. These discussions should be based on legitimate research that demonstrates the fiscal or other pedagogical benefits of such adjustments.

Determining Appropriateness of Class Maximums

Maximum class enrollment numbers are also an area of shared purview between the academic senate and the collective bargaining unit. Indication of class size maximums on the course outline of record is not a Title 5 requirement, so the extent to which maximum enrollments are included on the COR and the role of the curriculum committee in determining those class maximums vary with different bargaining agreements. Curriculum chairs and senate leaders should have wide-ranging and honest discussions with representatives of the bargaining unit to develop a process for setting class maximums that places the interests of students as well as the pedagogical integrity of the courses at the forefront. The ASCCC paper *Setting Course Enrollment Maximums: Process, Roles, and Principles,* adopted in Spring 2012, provides more detailed information on criteria for setting class maximums and examples of effective practice from the field. Title 5 makes the recommendation in §55208 to consider curriculum committee review of class size for distance education courses. In some districts, the determination of class size by the curriculum committee has been negotiated by collective bargaining units in conjunction with local academic senates. However, before any discussion is held or decision is made for setting class maximums, proper documentation of the agreement for each course is crucial to maintaining the integrity of the standard during the life of the COR.

Discussion Between Senate and Bargaining Unit

If bargaining language or district policy language on either the calendar and length of terms or maximum class enrollments is not satisfactory or is leading to scheduling or enrollment situations which do not seem pedagogically sound, the curriculum committee chair should initiate discussions between the local senate president and bargaining agent. In cases where district policy and contract language calls for a committee review and various signatures, clear policy should be established for how to proceed when a disagreement occurs.

Other Local Elements

During the process used to develop or revise a COR, the course may need to be reviewed by other disciplines. Other departments or colleges in a district may need to be aware of pending changes in order to mitigate unintended consequences. Many colleges have a practice of requesting discussion between disciplines or departments if a course might be seen as encroaching on more than one discipline; for example, both the theater arts and mass communications departments might be consulted before a film studies course is approved. Colleges in a multi-college district might have a process for discussion of courses that are common or similar between colleges in the district to provide broader academic opportunities for students.

In addition, the Chancellor's Office considers good practice to include discussion of curricular changes with a college's library faculty and staff in order to ensure that appropriate and adequate library materials and services are available to support the course.

Some other locally required data elements may be needed for the local curriculum management or tracking system that are not normally included in the COR itself, such as the course's active or inactive status, multi-college district curriculum approval elements, GE area requirements for CSU GE Breadth, IGETC, or local patterns, and inclusion of C-ID Numbering.

GENERAL CURRICULUM CONSIDERATIONS

Local Processes and Autonomy

Education Code §70902 authorizes academic senates as the primary recommending faculty body in the area of curriculum, while Title 5 §55002 requires the creation of local curriculum committees that are charged with approving courses and programs. Credit courses are certified by the curriculum chair and the chief instructional officer. However, district governing boards are the final approving body, and the California Community College Chancellor's Office is tasked with ensuring compliance and chaptering locally approved credit curriculum.

Course and Program Approval

For individual credit course approvals, including stand alone courses, the Chancellor's Office can waive the requirement for statewide approval through a certification process that attests to the fact that college curriculum committees, their parent senates, and their governing boards are in compliance with standards set forth in the *Program and Course Approval Handbook* (CCCCO, 6th edition). As a result, these courses can be locally approved.

Because the Chancellor's Office maintains the authority to approve new programs for degrees and certificates, CORs must be submitted with program approval requests. The Chancellor's Office is also required, according to Title 5 §55150 (a), to approve all noncredit courses.

More information about the development of certificates and degrees, as well as the requirements for Chancellor's Office program approval, can be found in the *Program and Course Approval Handbook*.

Program Review and the Course Outline of Record

The COR plays a critical role in the ongoing process of program review, which is how a college keeps its curriculum relevant and allocates its resources appropriately. When a college has an effective comprehensive planning process in place, the results of program reviews generally drive most other college decision-making. The COR is a critical element of any program review process because it lays the foundation for all learning needs such as facilities, equipment, supplies, and staff. Additional guidance on the broader subject of program review can be found in the ASCCC publications *Program Review: Developing a Faculty Driven Process* (ASCCC, 1996) and *Program Review: Setting a Standard*

(2009). The requirement for cyclical program and course assessment and review does not come solely from Title 5 or the Education Code; it is also a central requirement of the Accrediting Commission for Community and Junior Colleges for remaining an accredited institution. The presence of effective program review processes can ensure that CORs and other materials are kept up to date and relevant.

To streamline the course approval process, colleges should recognize that not all changes in the COR are of equal impact. Full curriculum committee review should apply only to those changes that require re-evaluation of criteria to assure that standards in Title 5 and the *Program and Course Approval Handbook* continue to be met. To that end, the Academic Senate for California Community Colleges suggests the following guidelines for curriculum committee action on proposed course changes.

Full Review by the Curriculum Committee: Substantive Changes

Full review means a complete analysis of the entire COR by the curriculum committee and a motion for approval by the full committee. The following substantive changes should trigger a full review:

- A major change in catalog description, objectives, or content that alters the need or justification for the course or calls into question the ability of the course to meet standards in Title 5 or the *Program and Course Approval Handbook*
- A change in units or hours
- A change in number of repetitions
- A change in credit/noncredit status
- A change in prerequisites, corequisites, or advisories
- A change in modality, such as distance education
- Course delivery in a highly compressed time frame
- Offering a course in experimental status
- Determination of imminent need to initiate expedited approval
- Placement of a course in a general education pattern
- Basic skills status

All proposals should be submitted with the written rationale for the change.

Approved on the Consent Agenda: Minor Changes

Changes that do not appear to affect statutory or regulatory curriculum standards but require judgment to confirm this conclusion can be placed on the consent agenda for a full curriculum committee vote. A prior review of these items should take place to ensure that the changes are such that standards are not affected. At most colleges, this review can be done by division faculty or a technical review subcommittee of the curriculum committee, but it should not be an administrative review alone.

Members of the full curriculum committee are expected to read the revised and previous course outlines and the accompanying rationale and may pull the item from the consent agenda for discussion if necessary. Otherwise, no comment is needed prior to a full committee vote.

The ASCCC recommends that the following minor changes to the COR be approved on the consent agenda as recommended either by vote of the division faculty or the technical review subcommittee or through whatever vetting process is agreed upon by the committee:

- Minor, non-substantive changes in catalog description, objectives, or content
- A change in course number that falls within college policy
- A change in course title
- Adding or dropping the course from an associate degree or certificate program, which must continue to be of two year or less duration

Again, a written rationale should accompany all proposed changes.

Information Item Only/No Action: Technical Changes

Some changes are technical in nature and require no review other than that of curriculum specialists and technicians who assist faculty to make the changes in the official COR. Others are within the areas of the COR for which a variety of methods are permissible provided that the course objectives are met and the course content covered.

The ASCCC recommends that the following changes be accepted as information items only, with no action required, upon the advice of the division or department faculty or technical review committee. Revised course outlines should be transmitted so that the course file can be kept up to date.

- Non-substantive changes in term length, as long as the hours-to-units relationship is maintained
- Changes in texts or instructional materials
- Changes in the sections on methods of instruction, assignments, or methods of evaluation as long as these changes are minor and would not trigger the need for a separate review or re-evaluation such as is required for ensuring regular effective contact in distance education and as long as the course continues to enable students to meet its objectives and fully covers the stated content.
- Addition of a focus area to a special topics course

CALIFORNIA'S EDUCATION SEGMENTS' ROLES AND STUDENTS

Articulation among California's segments of education is an important consideration in the development of curriculum and especially the COR, since the COR is the document most heavily relied on to establish articulation agreements. The process of articulation means to transition, or step from one rung of the learning ladder to another in an organized manner. This process can take place from high school directly to a university, or it can be a many-staged process such as high school to noncredit to community college to a four-year university to a post-graduate university.

Course Identification Numbering (C-ID) System and Associate Degrees for Transfer

With the mandate established by AB 1440 in 2010 for associate degrees for transfer (AA-T and AS-T degrees), the Course Identification Numbering (C-ID) System has provided course descriptors and numbers for most of the courses that are used in Transfer Model Curricula (TMC). C-ID identifies comparable courses and provides an independent number, different from the control number assigned by the Chancellor's Office, to those community college courses that are commonly transferred to universities. That number is based on a course template called a "descriptor" that is developed by discipline faculty in the CSU and community college systems. Colleges are required to submit their CORs for approval if a course is to be included in an Associate Degree for Transfer. Faculty should consider this system when developing courses or revising them and should review the appropriate course descriptor to ensure that their course meets the requirements to qualify as a C-ID course. Additional information can be found on the C-ID website (c-id.net).

CSU GE Breadth and IGETC

The California State University General Education Breadth and the Intersegmental General Education Transfer Curriculum are general education standards by which community college students can fulfill the lower division general education requirements of the university segments prior to transfer. Individual courses are submitted for consideration by community colleges and reviewed by committees consisting primarily of CSU and UC faculty. Faculty must be aware of which features of the COR can assist in conveying the essential depth, breadth, quality, and appropriateness of a course as related to these general education standards. Communication with a college's articulation officer is crucial in these areas. Courses can fail to receive approval for certification in a general education area for a variety of reasons, including a failure to meet subject matter requirements, a narrowness of focus, or a failure to demonstrate sufficient quality, currency, and completeness.

Detailed requirements for qualifying courses for CSU GE Breadth or IGETC, along with the IGETC Standards, can be found on the ASSIST website (*www.assist.org*). In addition, college articulation officers are familiar with these requirements and will be able to assist a faculty member writing or updating a COR.

Conclusion

Title 5 §55002 gives curriculum committees the responsibility for recommending to the local governing board in areas regarding curriculum, including new or modified course approval, grading policies, prerequisites, and others. This Title 5 section states that the curriculum 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." CORs are central to what is taught in the classroom, regardless of modality or discipline, and thus the creation and vetting of course outlines of record must be done by faculty members. While others may be involved in the process, including curriculum specialists and administrators, the faculty must take the professional responsibility as well as primary leadership to ensure that CORs are pedagogically sound. Ultimately, the creation and approval of course outlines of record must be for the benefit of students, must be a collaborative process involving faculty and staff, and must ensure that the highest standards for curricular quality and rigor are met.

Appendix I: Chancellor's Office Memorandum on the Standard Formula for Credit Hour Calculations

STATE OF CALIFORNIA   **BRICE W. HARRIS, CHANCELLOR**

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DATE:	October 2, 2015	AA 15-26
		VIA E-MAIL
TO:	Curriculum Instructional Officers	
FROM:	Pamela D. Walker	
	Vice Chancellor of Educational Services	
SUBJECT:	**Policy Change for Hours and Units Calculations for Credit Courses**	

The Chancellor's Office, in collaboration with the Program and Course Approval (PCAH) Writing Team, has refined the calculations and guidelines for hours and units for credit courses and will be in the forthcoming 6th edition of the PCAH.

Chancellor's Office staff has tested the new formula on credit courses currently in Curriculum Inventory and the calculations are accurate. As of October 5, the Chancellor's Office will be using the new formula for existing credit courses in the queue. However, if the formula does not work for a course then the Chancellor's Office will provide technical assistance as needed with the colleges. As colleges develop courses, please use the new calculations and guidelines for hours and units for credit courses (copy attached).

Please contact Jackie Escajeda, Interim Dean of Curriculum and Instruction at jescajeda@cccco.edu, if you have any questions regarding this memorandum.

cc: Kathleen Rose, SACC
       Erik Shearer, SACC
       Julie Adams, ASCCC
       Elias Regalado, California Community Colleges Chancellor's Office
       AAD Staff, California Community Colleges Chancellor's Office

California Community Colleges Chancellor's Office
Hours and Units Calculations

I. Standard Formula for Credit Hour Calculations

Standards for credit hour calculations are contained in title 5 §§55002.5, 55002(a)(2)(B), and 55002(b)(2)(B). Courses not classified as cooperative work experience, clock hour, or open entry/ open exit use the following method for calculating units of credit.

Divide the total of all student learning hours (lecture, lab, activity, clinical, TBA, other + outside-of-class hours) by the hours-per-unit divisor, round down to the nearest increment of credit awarded by the college. Expressed as an equation:

$$\frac{[\text{Total Contact Hours} + \text{Outside-of-class Hours}]}{\text{Hours-per-unit Divisor}} = \text{Units of Credit}$$

The result of this calculation is then rounded down to the nearest .5 increment or to the nearest fractional unit award used by the district, if smaller than .5.   This formula applies to both semester and quarter credit calculations. While this formula can yield a value below the lowest increment of credit awarded by the college, zero-unit courses are not permissible. The following definitions are used in the application of this formula:

- **Total Contact Hours**: The total time per term that a student is under the direct supervision of an instructor or other qualified employee as defined in §§58050 - 58051. This number is the sum of all contact hours for the course in all calculations categories, including lecture, recitation, discussion, seminar, laboratory, clinical, studio, practica, activity, to-be-arranged, etc. Contact hours for courses may include hours assigned to more than one instructional category, e.g. lecture and laboratory, lecture and activity, lecture and clinical.

- **Outside-of-class Hours**: Hours students are expected to engage in course work outside of the classroom. Federal and state regulations for credit hour calculations are based on the total time a student spends on learning, including outside-of-class hours. As a matter of standard practice in higher education, lecture and related course formats require two hours of student work outside of class for every hour in-class. All other academic work, including laboratory, activity, studio, clinical, practica, TBA, etc. must provide an equivalent total number of student learning hours as typically required for lecture, with the ratio of in-class to outside-of-class work prorated appropriately for the instructional category.

Typically, these ratios are expressed as follows:

Instructional Category	In-class Hours	Outside-of-class Hours
Lecture (Lecture, Discussion, Seminar and Related Work)	1	2
Activity (Activity, Lab w/ Homework, Studio, and Similar)	2	1
Laboratory (Traditional Lab, Natural Science Lab, Clinical, and Similar)	3	0

Other categories or ratios for inside- to outside-of-class hours are possible, but should fall within the parameters for one unit of credit as described above. Standard expectations in higher education for credit hour calculations generally align with the in-class to outside-of-class ratios as described in this table. Deviations from these widely accepted standards, while permitted, can negatively affect course transferability and articulation and should be used with caution. Since TBA hours are required to be listed separately on the COR, any outside-of-class hours expected of students in relationship to TBA contact hours must be included in the total student learning hours for the calculation.

- **Hours-per-unit Divisor**: The value, or value range, used by the college to define the number of hours required to award each unit of credit. This value must be minimum of 48 and maximum of 54 hours for colleges on the semester system and a minimum of 33 and maximum of 36 for colleges on the quarter system. This number represents the total student learning hours for which the college awards one unit of credit. Colleges may use any divisor within this range, but should maintain consistency between the divisor and the dividend. For example, if a college uses the 51 = 1 unit calculation to determine the hours of lecture and outside of class work in the dividend, they should use 51 as the divisor. Colleges that indicate the minimum and maximum range of 48 – 54 should show that same range for the dividend in the equation and resulting unit calculation.

Colleges must exercise caution in determining the hours-per-unit divisor for credit hour calculations. Because California finance laws assume that primary terms average 17-weeks on the semester system and 11⅔ weeks on the quarter system (the two semesters or three quarters equal the traditional 35-week academic year), and because student attendance and related apportionment state compliance auditing is based on the student contact hours delineated in the official COR, the Chancellor's Office strongly recommends that colleges use the 18-week semester or 12-week quarter as the basis for the student contact hour calculation used in the COR, even if a college has been approved to use a compressed academic calendar. The 18-week semester or 12-week quarter primary term provides the greatest flexibility in terms of contact hours, and colleges do not risk an audit finding for excessive apportionment claims such as they might experience using a 16-week semester basis for the contact-

hour calculation. Additionally, it is also important to note the flexible calendar program is designed around the 35-week traditional academic calendar, so basing contact hour targets around an 18-week semester assures that instructional hours lost to "flex" activities will not result in the district not providing the minimum number of hours required by Title 5, section 55002.5, to award a unit of credit. Colleges using the 48-hour minimum calculation for determining credit hours risk problems with apportionment calculations and audits. Colleges must be specifically authorized by the Chancellor's Office to use a compressed calendar, which adds further caution to the use of the minimum end of the hour to unit range.

Likewise, the activity or laboratory with homework calculation should be used with caution. In the natural sciences and other disciplines, it is standard practice to base the number of units awarded for laboratory solely on contact hours, even though there may be some expectation of student work or preparation outside of class. Any alteration of this relationship for laboratory courses in the natural sciences and clinical hours in many allied health fields, can jeopardize programmatic accreditation where specific ratios or hours are required for program components or course acceptability in meeting major or general education requirements when transferred to a baccalaureate degree-granting institution. Use of this category should be restricted to only those instructional areas where it is clearly aligned with accepted practices higher education. The term "activity" as used in this context is not intended to limit or define the use of this term locally. Some colleges use this term—and related credit calculations— interchangeably with laboratory.

The Course Outlines of Record for many districts do not specify the outside-of-class hours, relying instead on the assumption of traditional ratios for inside- to outside-of-class hours for lecture, laboratory, or other course formats. In instances where districts only record total contact hours for the course as a whole or in each instructional category on the Course Outline of Record, the course submission must include the expected hours of student work outside of class used to determine total student learning hours for the purposes of credit calculations as described above. The tables on the following pages provide guidance for the expected outside-of-class hours for a wide range of typical credit hour calculations.

II. Fractional Unit Awards and Minimum Thresholds

Title 5 requires colleges to award units of credit in .5 unit increments at a minimum. Calculations for each increment of credit awarded by the college represent the minimum threshold for awarding that increment of credit. Students are awarded the next increment of credit only when they pass the next minimum threshold.

For example, if a course is designed to require 180 total student learning hours (36 lecture, 72 lab, and 72 outside-of-class hours), the calculation of units works as follows:

$$180 / 54 = 3.33$$

3 units of credit

In this example, the college would not award 3.5 units until the total student learning hours reached the 189-hour minimum threshold for 3.5 units. However, if a college offers credit in .25 increments, this example would yield a 3.25 unit course. Another common example is a course offered for 40 contact hours, with no hours of homework, resulting in 40 total student learning hours. In a district that awards credit in .5 increments, 40 total student learning hours / 54 = .75, which meets the minimum threshold for .5 units of credit, but does not pass the minimum threshold for 1 unit of credit. In this example, 40 total student learning hours (36 contact and 4 outside-of-class) would award .5 units of credit. This is similar to grading systems where, for example, a student earns a "B" for any percentage between 80 and 89. The student is only awarded an "A" when they reach the minimum threshold of 90 percent.

III. Cooperative Work Experience

Units for Cooperative Work Experience courses are calculated as follows:

- Each 75 hours of paid work equals one semester credit or 50 hours equals one quarter credit.
- Each 60 hours of non-paid work equals one semester credit or 40 hours equals one quarter credit.

IV. Clock Hour Courses / Programs

The definition of a clock hour program and standards for awarding of units of credit for these programs is defined in federal regulations 34 CFR §668.8(k)(2)(i)(A) and 668.8(l), respectively. In this regulation, a program is considered to be a clock-hour program if a program is required to measure student progress in clock hours when:

- Receiving Federal or State approval or licensure to offer the program; or
- Completing clock hours is a requirement for graduates to apply for licensure or the authorization to practice the occupation that the student is intending to pursue.

Programs that meet this definition are required to use a federal formula for determining the appropriate awarding of credit that is outlined in 34CFR §668.8(l).

V. Local Policy

Colleges are encouraged to develop local policy, regulations, or procedures specifying the accepted relationship between contact hours, outside-of-class hours, and credit for calculating credit hours to ensure consistency in awarding units of credit. The creation of a standing policy or formal calculation document helps districts fulfill the responsibility of local governing boards under Title 5 §55002 to establish the relationship between units and hours for the local curriculum development and approval process.

VI. Sample Calculations Tables

The tables on the following pages provide examples of common configurations for credit hour calculations, divided into two sections.

The first section provides tables for three most common ratios of in-class to outside-of-class work as described above for semester calculations. The table on the left provides calculations for the minimum 48 hours = 1 unit of credit. The table on the right provides calculations for the maximum baseline of 54 hours = 1 unit of credit. For colleges that use 51, 52.5 or other intermediate divisors, the same general principle and ratios apply and all calculations should fall between these two number sets. For example, a college using 51 as the divisor would show 3 units of lecture credit as 51 hours of in-class work, 102 hours outside of class for a total of 153 total student learning hours. While these tables are not prescriptive, they are accurate guides for the development of local processes or policy and provide good examples of compliant calculations that are aligned to widely accepted standards for higher education. The second section provides examples of calculation tables in the same format for quarter calculations.

Section 1: Sample Calculation Tables – Semester Calculations

Lecture Units	48 = 1 unit			54 = 1 unit		
	Contact Hours	Homework Hours	Total Student Learning Hours		Homework Hours	Total Student Learning Hours
0.50	8	16	24	9	18	27
1.00	16	32	48		36	54
1.50	24	48	72	27	54	81
2.00	32	64	96		72	108
2.50	40	80	120	45	90	135
3.00	48	96	144		108	162
3.50	56	112	168	63	126	189
4.00	64	128	192		144	216
4.50	72	144	216	81	162	243
5.00	80	160	240		180	270
5.50	88	176	264	99	198	297
6.00	96	192	288		216	324
6.50	104	208	312	117	234	351
7.00	112	224	336		252	378
7.50	120	240	360	135	270	405
8.00	128	256	384		288	432
8.50	136	272	408	153	306	459
9.00	144	288	432		324	486
9.50	152	304	456	171	342	513
10.00	160	320	480		360	540
10.50	168	336	504	189	378	567
11.00	176	352	528		396	594
11.50	184	368	552	207	414	621
12.00	192	384	576		432	648
12.50	200	400	600	225	450	675
13.00	208	416	624		468	702
13.50	216	432	648	243	486	729
14.00	224	448	672		504	756
14.50	232	464	696	261	522	783
15.00	240	480	720		540	810
15.50	248	496	744	279	558	837
16.00	256	512	768		576	864
16.50	264	528	792	297	594	891
17.00	272	544	816		612	918
17.50	280	560	840	315	630	945
18.00	288	576	864		648	972

Activity, Lab w/Hmwrk	48 = 1 unit			54 = 1 unit		
Units	Contact Hours	Homework Hours	Total Student Learning Hours		Homework Hours	
0.50	16	8	24	18	9	27
1.00	32	16	48		18	
1.50	48	24	72	54	27	81
2.00	64	32	96		36	
2.50	80	40	120	90	45	135
3.00	96	48	144		54	
3.50	112	56	168	126	63	189
4.00	128	64	192		72	
4.50	144	72	216	162	81	243
5.00	160	80	240		90	
5.50	176	88	264	198	99	297
6.00	192	96	288		108	
6.50	208	104	312	234	117	351
7.00	224	112	336		126	
7.50	240	120	360	270	135	405
8.00	256	128	384		144	
8.50	272	136	408	306	153	459
9.00	288	144	432		162	
9.50	304	152	456	342	171	513
10.00	320	160	480		180	
10.50	336	168	504	378	189	567
11.00	352	176	528		198	
11.50	368	184	552	414	207	621
12.00	384	192	576		216	
12.50	400	200	600	450	225	675
13.00	416	208	624		234	
13.50	432	216	648	486	243	729
14.00	448	224	672		252	
14.50	464	232	696	522	261	783
15.00	480	240	720		270	
15.50	496	248	744	558	279	837
16.00	512	256	768		288	
16.50	528	264	792	594	297	891
17.00	544	272	816		306	
17.50	560	280	840	630	315	945
18.00	576	288	864		324	

Lab, Clinical, Activity, etc. Units	48 = 1 unit			54 = 1 unit		
	Contact Hours	Homework Hours	Total Student Learning Hours	Contact Hours	Homework Hours	Total Student Learning Hours
0.50	24	0	24	27	0	27
1.00	48	0	48	54	0	54
1.50	72	0	72	81	0	81
2.00	96	0	96	108	0	108
2.50	120	0	120	135	0	135
3.00	144	0	144	162	0	162
3.50	168	0	168	189	0	189
4.00	192	0	192	216	0	216
4.50	216	0	216	243	0	243
5.00	240	0	240	270	0	270
5.50	264	0	264	297	0	297
6.00	288	0	288	324	0	324
6.50	312	0	312	351	0	351
7.00	336	0	336	378	0	378
7.50	360	0	360	405	0	405
8.00	384	0	384	432	0	432
8.50	408	0	408	459	0	459
9.00	432	0	432	486	0	486
9.50	456	0	456	513	0	513
10.00	480	0	480	540	0	540
10.50	504	0	504	567	0	567
11.00	528	0	528	594	0	594
11.50	552	0	552	621	0	621
12.00	576	0	576	648	0	648
12.50	600	0	600	675	0	675
13.00	624	0	624	702	0	702
13.50	648	0	648	729	0	729
14.00	672	0	672	756	0	756
14.50	696	0	696	783	0	783
15.00	720	0	720	810	0	810
15.50	744	0	744	837	0	837
16.00	768	0	768	864	0	864
16.50	792	0	792	891	0	891
17.00	816	0	816	918	0	918
17.50	840	0	840	945	0	945
18.00	864	0	864	972	0	972

Section 2: Sample Calculation Tables - Quarter Calculations

Lecture	33 = 1 unit			36 = 1 unit		
Units	Contact Hours	Homework Hours	Total Student Learning Hours	Contact Hours	Homework Hours	Total Student Learning Hours
0.5	5.5	11	16.5	6	12	18
1.0	11.0	22	33.0	12	24	36
1.5	16.5	33	49.5	18	36	54
2.0	22.0	44	66.0	24	48	72
2.5	27.5	55	82.5	30	60	90
3.0	33.0	66	99.0	36	72	108
3.5	38.5	77	115.5	42	84	126
4.0	44.0	88	132.0	48	96	144
4.5	49.5	99	148.5	54	108	162
5.0	55.0	110	165.0	60	120	180
5.5	60.5	121	181.5	66	132	198
6.0	66.0	132	198.0	72	144	216
6.5	71.5	143	214.5	78	156	234
7.0	77.0	154	231.0	84	168	252
7.5	82.5	165	247.5	90	180	270
8.0	88.0	176	264.0	96	192	288
8.5	93.5	187	280.5	102	204	306
9.0	99.0	198	297.0	108	216	324
9.5	104.5	209	313.5	114	228	342
10.0	110.0	220	330.0	120	240	360
10.5	115.5	231	346.5	126	252	378
11.0	121.0	242	363.0	132	264	396
11.5	126.5	253	379.5	138	276	414
12.0	132.0	264	396.0	144	288	432
12.5	137.5	275	412.5	150	300	450
13.0	143.0	286	429.0	156	312	468
13.5	148.5	297	445.5	162	324	486
14.0	154.0	308	462.0	168	336	504
14.5	159.5	319	478.5	174	348	522
15.0	165.0	330	495.0	180	360	540
15.5	170.5	341	511.5	186	372	558
16.0	176.0	352	528.0	192	384	576
16.5	181.5	363	544.5	198	396	594
17.0	187.0	374	561.0	204	408	612
17.5	192.5	385	577.5	210	420	630
18.0	198.0	396	594.0	216	432	648

Activity or Lab w/Hmwk Units	33 = 1 unit			36 = 1 unit		
	Contact Hours	Homework Hours	Total Student Learning Hours	Contact Hours	Homework Hours	Total Student Learning Hours
0.5	11.0	5.5	16.5	12	6	18
1.0	22.0	11.0	33.0	24	12	36
1.5	33.0	16.5	49.5	36	18	54
2.0	44.0	22.0	66.0	48	24	72
2.5	55.0	27.5	82.5	60	30	90
3.0	66.0	33.0	99.0	72	36	108
3.5	77.0	38.5	115.5	84	42	126
4.0	88.0	44.0	132.0	96	48	144
4.5	99.0	49.5	148.5	108	54	162
5.0	110.0	55.0	165.0	120	60	180
5.5	121.0	60.5	181.5	132	66	198
6.0	132.0	66.0	198.0	144	72	216
6.5	143.0	71.5	214.5	156	78	234
7.0	154.0	77.0	231.0	168	84	252
7.5	165.0	82.5	247.5	180	90	270
8.0	176.0	88.0	264.0	192	96	288
8.5	187.0	93.5	280.5	204	102	306
9.0	198.0	99.0	297.0	216	108	324
9.5	209.0	104.5	313.5	228	114	342
10.0	220.0	110.0	330.0	240	120	360
10.5	231.0	115.5	346.5	252	126	378
11.0	242.0	121.0	363.0	264	132	396
11.5	253.0	126.5	379.5	276	138	414
12.0	264.0	132.0	396.0	288	144	432
12.5	275.0	137.5	412.5	300	150	450
13.0	286.0	143.0	429.0	312	156	468
13.5	297.0	148.5	445.5	324	162	486
14.0	308.0	154.0	462.0	336	168	504
14.5	319.0	159.5	478.5	348	174	522
15.0	330.0	165.0	495.0	360	180	540
15.5	341.0	170.5	511.5	372	186	558
16.0	352.0	176.0	528.0	384	192	576
16.5	363.0	181.5	544.5	396	198	594
17.0	374.0	187.0	561.0	408	204	612
17.5	385.0	192.5	577.5	420	210	630
18.0	396.0	198.0	594.0	432	216	648

Lab, Clinical, Activity, etc. Units	33 = 1 unit			36 = 1 unit		
	Contact Hours	Homework Hours	Total Student Learning Hours	Contact Hours	Homework Hours	Total Student Learning Hours
0.5	16.5	0.0	16.5	18	0	18
1.0	33.0	0.0	33.0	36	0	36
1.5	49.5	0.0	49.5	54	0	54
2.0	66.0	0.0	66.0	72	0	72
2.5	82.5	0.0	82.5	90	0	90
3.0	99.0	0.0	99.0	108	0	108
3.5	115.5	0.0	115.5	126	0	126
4.0	132.0	0.0	132.0	144	0	144
4.5	148.5	0.0	148.5	162	0	162
5.0	165.0	0.0	165.0	180	0	180
5.5	181.5	0.0	181.5	198	0	198
6.0	198.0	0.0	198.0	216	0	216
6.5	214.5	0.0	214.5	234	0	234
7.0	231.0	0.0	231.0	252	0	252
7.5	247.5	0.0	247.5	270	0	270
8.0	264.0	0.0	264.0	288	0	288
8.5	280.5	0.0	280.5	306	0	306
9.0	297.0	0.0	297.0	324	0	324
9.5	313.5	0.0	313.5	342	0	342
10.0	330.0	0.0	330.0	360	0	360
10.5	346.5	0.0	346.5	378	0	378
11.0	363.0	0.0	363.0	396	0	396
11.5	379.5	0.0	379.5	414	0	414
12.0	396.0	0.0	396.0	432	0	432
12.5	412.5	0.0	412.5	450	0	450
13.0	429.0	0.0	429.0	468	0	468
13.5	445.5	0.0	445.5	486	0	486
14.0	462.0	0.0	462.0	504	0	504
14.5	478.5	0.0	478.5	522	0	522
15.0	495.0	0.0	495.0	540	0	540
15.5	511.5	0.0	511.5	558	0	558
16.0	528.0	0.0	528.0	576	0	576
16.5	544.5	0.0	544.5	594	0	594
17.0	561.0	0.0	561.0	612	0	612
17.5	577.5	0.0	577.5	630	0	630
18.0	594.0	0.0	594.0	648	0	648

Appendix II: Glossary

Advisories

A course, courses, or skill that a student should have taken or possess but that is not required prior to taking the course with the advisory.

Articulation

A process of establishing pathways for students to connect courses or programs from one learning segment to another, usually higher, segment.

Assignment

A structured set of tasks or accomplishments, usually with a defined work product to be submitted for review or grading.

Associate Degree for Transfer (ADT)

A degree that meets specific legal requirements defined in Education Code §§66745-66749 and guarantees students admission into the California State University system upon completion of the degree at a California community college.

Career Technical Education (CTE)

Formerly known as vocational or occupational education. CTE courses and programs are designed to provide students a pathway to immediate employment. Programs within CTE can vary but are coded as CTE at the Chancellor's Office.

Catalog Description

A Title 5 requirement that should contain all relevant information about a course that students, counselors, and reviewers will need for planning and review. (See Course Description)

CDCP or Enhanced Funding

A special tier of funding for noncredit courses designed to attain short term occupational goals or to prepare students for the workforce, workforce education, or college education.

Certificate of Achievement

Specific types of certificates granted to students and entered onto their transcripts for credit programs.

Certificate of Completion or Competency

Specific types of certificates granted to students in some noncredit programs.

Chancellor's Office (CO)

Formerly known as the System Office. The California Community Colleges Chancellor's Office oversees the implementation of Title 5 and Education Code and provides support and training to colleges in the California Community College system.

Course Identification Numbering System (C-ID)

A supra-numbering system developed to allow for greater ease of transfer and articulation, both among California community college campuses and between the CCCs and California State University systems.

Class Time

A legal definition of time spent in the classroom, lab, or activity area or engaged in synchronous and asynchronous activities in a distance education course.

Community Service Offering

A course offering in which the full cost of the course is paid by the students taking the course. Such courses cannot be offered for credit and are not required to go through local curriculum processes.

Contact Hours

The actual hours a student is engaged in class time activities.

Content

Detailed items of a course outline that are focused on the subject area. These items are typically organized in a taxonomy of groups and sub groups. They should be relevant to one or more of the course objectives.

Contract Education Courses

Courses offered by a college through a contract with another entity. Generally, the courses are funded by that entity and may or may not result in the awarding of college credit. Contract education courses that are offered for college credit must meet all of the requirements for credit courses.

Cooperative Work Experience Courses

Courses with variable units designed to get students into the workplace while earning college credit. Students earn units based upon hours of work.

Corequisites

A course or courses that must be taken in conjunction with the course containing the corequisite. One example is a lab course to be taken with a corequisite lecture course. In the case of a corequisite, the two courses must be taken together. If the lecture can be taken prior to or concurrently with the lab, then the lab should have both a corequisite and prerequisite on the lecture.

Course Description

Information about a course that is to be contained within the catalog description, the course outline of record, and the syllabus. (See Catalog Description)

Course Outline of Record (COR)

A document required by Title 5 that describes the elements of a course. It is also the binding contract among faculty, students, and a district defining the terms and conditions for learning and evaluating performance.

Credit Courses

Courses that districts are authorized to deliver that, when taken by a student, will cause a permanent record of credit to be made in the student's transcript of record. Course credit status can also affect financial aid and fees.

Critical Thinking

A quality and intensity of thinking that is commonly described in terms of the taxonomy of verbs developed by Benjamin Bloom in 1956. It is commonly associated with the top three levels of the taxonomy—analysis, synthesis, and evaluation. Title 5 §55002(a) and (b) require learning components of critical thinking in their respective standards for approval.

CSU GE Breadth

A pattern of courses that, if completed by a student at a California community college, allows that student to transfer to a CSU campus and fulfills lower division general education requirements.

Degree Applicable Credit Courses

A type of credit course that is transcripted in the student's record and can be counted toward a degree.

Delivery

The method by which a course is conducted.

Discipline

A subject area of courses that is usually as broad as or broader than a program area and defines the required areas of expertise of faculty teaching courses.

Distance Learning (Distance Education)

Learning that is designed to have regular face-to-face class time replaced by learning time in which the student and instructor are separated.

Educational Program

A sequence of courses that leads to a defined goal that meets the mission criteria for California community colleges as established in California Education Code.

Evaluation (Student Evaluation)

The act of determining that student learning has occurred for an individual student. Evaluation can be formative (to inform for the purposes of tailoring the learning experience) or summative (for the purpose of a final determination of the student's mastery of the subject materials).

Experimental Course

A course that is being delivered, usually for the first time, to determine a host of course factors, including student interest in the subject matter. Experimental courses must be approved through the regular curriculum process are given temporary latitude in one or more areas where course outline of record components are not fully discernable, such as student interest.

Field Trip

A planned learning experience that requires students to relocate to a place appropriate to the learning experience being implemented. Field trips are generally expected to require travel beyond typical walking distances and can be out of state. Regulatory requirements exist for field trips. Districts will have notification forms and may have insurance or other local requirements.

General Education

A designed compilation of courses that broaden a student's thinking capacity and capabilities beyond the major's area of focus. Such coursework should inspire in students' curiosity in the wider world, self-reflection, and an increased engagement in the civic and social structures in which they live. Multiple general education pathways exist, including CSU GE Breadth, IGETC, and local patterns. Local patterns must fulfill the requirements delineated in Title 5.

Homework

Coursework designed into the course to be accomplished outside of class time.

Independent Study Course

A course packaging option that is designed to offer one-on-one instruction with one or a few students to achieve specific goals beyond the current scope of existing courses. Such a course should be fairly specific, can collect apportionment, and has clear rules about faculty and student activities and interaction required.

Intensity

A quality or characteristic that defines the level of thinking being sought by the curriculum. With respect to the Standards for Approval in Title 5 §55002, intensity also refers to the student's capacity to study independently.

Intersegmental General Education Transfer Curriculum (IGETC)

A pattern of courses that, if completed by a student at a California community college, allows that student to transfer to a CSU or UC campus and fulfills lower division general education requirements.

Lower Division

Generally understood as the first two years of a four-year degree. Community college degree-applicable courses are generally considered lower division courses.

Matriculation

The intentional processes or pathways by which students move from course to course or program to program or service within one college.

Methods of Instruction

An element in the course outline of record that describes the techniques that may be used to cause learning. These techniques may include lecture, group discussion, and synchronous or asynchronous interaction.

Mission

The mission for California's community colleges is defined in Education Code. The current mission focuses on transfer education, career technical education, and basic skills education.

Modality

The primary instructional delivery method that describes the general relationship that exists between students and their learning environment, which includes the faculty. Several modality examples are face-to-face in a lecture, lab, or activity, field trips, work experience, internships, or other real time emersion experiences, at a distance using real time interconnectivity such as the Internet or telephones, or at a distance using one way interconnectivity such as recorded television, audio, or correspondence. Regulations differentiate the modalities into two groups—in-person and at-a-distance—with respect to the instructor and student, so the common usage of the term is to differentiate between these two groups.

Noncredit

Courses that districts are authorized to deliver that when taken by a student do not result in a permanent record of credit to be made in the student's transcript of record unless local policy allows for letter grades or satisfactory progress indicators. Noncredit courses are delimited in regulation and can only be offered in specified areas, some of which overlap with credit instruction.

Non-degree Applicable Credit Courses

A type of credit course that is transcripted in the student's record but does not count toward a degree. These courses commonly address pre-collegiate level basic skills and workforce preparation.

Not-for-Credit Courses

Another term for both "community service offerings" and for "contract education courses" that do not earn credit. These courses are often confused with noncredit courses, but the term "noncredit" is specifically reserved for use as defined in Title 5 §55002(c).

Objectives

The key elements that must be taught every time a course is delivered.

Open-entry/Open-exit Courses

Courses that allow for students to enroll in or drop a course at any time without penalty. These courses are positive attendance courses.

Open Educational Resources (OER)

Materials that are available to students at little or no cost for anyone to use.

Prerequisites

Coursework or skills that have been demonstrated to be necessary for most students to be successful in a course.

Program Review

A process of review, assessment, analysis, and planning at the program level that, when integrated effectively into institutional decision-making, drives most institutional decisions.

Scope

In Title 5 under Standards for Approval, "scope," along with "intensity," describes the breadth of domain a college level course should cover.

Special Topics Course

A course that is designed to change an auxiliary focus each time it is offered.

Student Learning Outcomes (SLOs)

Student learning outcomes (SLOs) are the specific observable or measurable results that are expected subsequent to a learning experience. These outcomes may involve knowledge (cognitive), skills (behavioral), or attitudes (affective) that provide evidence that learning has occurred as a result of a specified course, program activity, or process. An SLO refers to an overarching outcome for a course, program, degree or certificate, or student services area such as the library. SLOs describe a student's ability to synthesize many discreet skills using higher level thinking skills and to produce something that asks them to apply what they have learned. SLOs usually encompass a gathering together of smaller discrete objectives through analysis, evaluation, and synthesis into more sophisticated skills and abilities.

Study (Independently)

This concept implies that most students would not be able to master course material without additional effort outside of normal course activities, whether inside or outside of class time. It also implies that the student is capable of self-directed study and research, meaning the student must be able to operate at some higher cognitive level.

Syllabus

A document that faculty distribute to students at the beginning of a course that includes the information necessary for the students to develop an understanding of the requirements needed for them to be successful in the course. Syllabi usually also include required textbooks and a schedule of assignments. Such a document often contains many elements from the course outline of record, the college catalog, references to student codes of conduct, student learning outcomes, and course objectives.

Textbooks/Instructional Materials

Materials used in a course for instructional purposes. A specific textbook can be a factor in the ability for a course to articulate to other colleges or to receive C-ID designation. Materials other than textbooks are typically known as "other instructional materials."

Title 5 Regulations

A part of the California Code of Regulations that specifically covers K-12, the California Community Colleges, and the CSU segments.

Transferability

Refers to a whether a course is accepted for credit toward an educational goal at a receiving institution.

Units

A unit is a credit per hour scale. California community colleges use two scales, the quarter and the semester, where the former is 2/3 of the latter. Forty-eight semester hours generally equals one semester unit of credit being transcripted in a student's record. Thirty-three quarter hours generally equals one quarter unit of credit. Since noncredit does not record any credit in a student's record, units do not apply to noncredit courses.

Upper Division

Generally advanced undergraduate coursework that is taken in the last two years of a four-year bachelor's degree.

Variable Unit Courses

A course with the units earned by the student based upon the student's capacity to complete time on task. Variable units are commonly used for work experience courses and independent study courses.

Appendix III: Course Outline of Record Title 5 Requirements

Title 5 §55002 does much to establish many elements of a course outline of record, but it does not paint the complete picture of what the COR must accommodate. The following list is meant to provide a broader snapshot of these additional factors.

Alternative Course Formats

    Cooperative Work Experience Education . . . . §55250-§55257

    Independent Study . . . . §55230-§55240

    Open Entry/Open Exit. . . . . §58164

    Special Topics/Activity Courses. . . . . §55041, §58161

Supplemental Instruction . . . .§58168-§58172

Certificates of Achievement . . . . §55070

Degrees/Area of Emphasis . . . .§55063

Distance Education. . . . . §55200-§55210

Excursions and Field Trips . . . . §55220, §58166

Grading Policies. . . . . .55021-§55023

Noncredit Programs . . . . §55150-§55155

Enhanced funding . . . . §55151-§55154

Requisites . . . .§55003

Appendix IV: Relevant Publication Resources

ACCREDITATION

Accrediting Commission for Community and Junior Colleges. (2014). *Accreditation standards.* Retrieved from http://www.accjc.org/

Academic Senate for California Community Colleges. (2009). *SLO terminology glossary – A resource for local senates.* Retrieved from http://www.asccc.org/sites/default/files/publications/SLO-Glossary-2010_0.pdf.

Academic Senate for California Community Colleges. (2015). *Effective practices in accreditation: A guide for faculty.* Retrieved from http://www.asccc.org/sites/default/files/Accreditation_paper.pdf.

ARTICULATION

Intersegmental Committee of the Academic Senates. (2006). *A transfer discussion.* Retrieved from http://icas-ca.org/Websites/icasca/Images/ICASTransferDocument.pdf

California Intersegmental Articulation Council. *California articulation policies and procedures handbook.* Retrieved from http://ciac.csusb.edu/documents/CIAC_Handbook_Spring_2013.pdf.

CHANCELLOR'S OFFICE GUIDELINES

Chancellor' Office. (2001). *Student attendance accounting manual.* Retrieved from http://extranet.cccco.edu/Divisions/FinanceFacilities/FiscalServicesUnit/StudentAttendanceAccountingManual.aspx#Attendance_Accounting_/_FTES.

Chancellor' Office. (2011). *Distance education guidelines.* Retrieved from http://extranet.cccco.edu/Divisions/AcademicAffairs/EducationalProgramsandProfessionalDevelopment/DistanceEducation.aspx

Chancellor' Office. (2012). *Budget and accounting manual.* Retrieved from http://extranet.cccco.edu/Divisions/FinanceFacilities/FiscalStandardsandAccountibilityUnit/FiscalStandards/BudgetandAccountingManual.aspx.

Chancellor' Office. (2012). *Guidelines for title 5 §55003: Policies for prerequisites, corequisites and advisories on recommended preparation.* Retrieved from http://extranet.cccco.edu/Portals/1/AA/Prerequisites/Prerequisites_Guidelines_55003%20Final.pdf

Chancellor' Office. (2013). *California community colleges taxonomy of programs.* Retrieved from http://extranet.cccco.edu/Portals/1/AA/Credit/2013Files/TOPmanual6_2009_09corrected_12.5.13.pdf.

Chancellor' Office. (2013). *Guidelines on course repetition*. Retrieved from http://extranet.cccco.edu/ Portals/1/AA/Credit/2013Files/CreditCourseRepetitionGuidelinesFinal.pdf

Chancellor' Office. (2013). *Program and course approval handbook*. Retrieved from http://extranet.cccco. edu/Portals/1/AA/ProgramCourseApproval/Handbook_5thEd_BOGapproved.pdf

CURRICULUM AND CURRICULUM GUIDELINES

Academic Senate for California Community Colleges. (1988*). Critical thinking skills in the college curriculum*. Retrieved from http://www.asccc.org/sites/default/files/publications/ CriticalThinkingSkills_0.pdf.

Academic Senate for California Community Colleges. (1998). *Information competency in the California community colleges,* Retrieved from http://www.asccc.org/sites/default/files/publications/InfoComp_0.pdf.

Academic Senate for California Community Colleges. (2002). *Information Competency: Challenges and Strategies for Development.* Retrieved from http://www.asccc.org/sites/default/files/publications/ InfoCompetency_0.pdf.

Academic Senate for California Community Colleges. (2016). *Ensuring effective curriculum approval processes: A guide for local senates.* Retrieved from http://www.asccc.org/sites/default/files/Effective%20 Curriculum%20Approval%20Process_0.pdf.

MISCELLANEOUS

Academic Senate for California Community Colleges. (2007). *Promoting and sustaining an institutional climate of academic integrity.* Retrieved from http://www.asccc.org/papers/promoting-and-sustaining-institutional-climate-academic-integrity.

Academic Senate for California Community Colleges. (2009). *Program review: Setting a standard.* Retrieved from http://www.asccc.org/sites/default/files/publications/Program-review-spring09_0.pdf.

Academic Senate for California Community Colleges. (2012). *Setting course enrollment maximums: Process, roles, and principles.* Retrieved from http://www.asccc.org/papers/setting-course-enrollment-maximums-process-roles-and-principles.

Academic Senate for California Community Colleges. (2012). *Standards of practice for California community college library faculty and programs*. Retrieved from http://www.asccc.org/papers/standards-practice-california-community-college-library-faculty-and-programs.

Chancellor's Office. (2014). *Minimum qualifications for faculty and administrators in the California community colleges.* Retrieved from http://californiacommunitycolleges.cccco.edu/Portals/0/ Reports/2016-Minimum-Qualifications-Report-ADA.pdf.

PREREQUISITES, COREQUISITES, AND ADVISORIES

Academic Senate for California Community Colleges. (1997). *Good practices for the implementation of prerequisites.* Retrieved from http://www.asccc.org/papers/good-practices-implementation-prerequisites.

Academic Senate for California Community Colleges. (2011). *Implementing content review for communication and computation prerequisites.* Retrieved from http://www.asccc.org/papers/implementing-content-review-communication-and-computation-prerequisites.

Academic Senate for California Community Colleges. (2010). *Student success: The case for establishing prerequisites through content review.* Retrieved from http://www.asccc.org/papers/student-success-case-establishing-prerequisites-through-content-review.

Appendix V: Resources Links

Academic Senate for California Community Colleges (ASCCC) www.asccc.org

Accrediting Commission for Community and Junior Colleges (ACCJC) http://www.accjc.org/

California Department of Education (K-12) http://www.cde.ca.gov/

California Community Colleges Chancellor's Office (CCCCO) http://www.cccco.edu

California State University (CSU) http://www.calstate.edu/

Course Identification Numbering System (C-ID) https://c-id.net/

Intersegmental Committee of the Academic Senates (ICAS) http://www.asccc.org/icas.html

United States Department of Education (USDE) http://www.ed.gov/index.jhtml

University of California (UC) http://www.universityofcalifornia.edu

Western Association of Schools and Colleges (WASC) http://www.wascweb.org/

Hours to Units - Semester

CCCCO Worksheet

CARNEGIE UNITS - SEMESTER

Lecture		Lab	
17.5 hours = 1 unit		**52.5 hours = 1 unit**	
Hours	Units	Hours	Units
8.8	0.5	26.3	0.50
17.5	1.0	52.5	1.00
26.3	1.5	78.8	1.50
35.0	2.0	105.0	2.00
43.8	2.5	131.3	2.50
52.5	3.0	157.5	3.00
61.3	3.5	183.8	3.50
70.0	4.0	210.0	4.00
78.8	4.5	236.3	4.50
87.5	5.0	262.5	5.00
96.3	5.5	288.8	5.50
105.0	6.0	315.0	6.00
113.8	6.5	341.3	6.50
122.5	7.0	367.5	7.00
131.3	7.5	393.8	7.50
140.0	8.0	420.0	8.00
148.8	8.5	446.3	8.50
157.5	9.0	472.5	9.00
166.3	9.5	498.8	9.50
175.0	10.0	525.0	10.00
183.8	10.5	551.3	10.50
192.5	11.0	577.5	11.00
201.3	11.5	603.8	11.50
210.0	12.0	630.0	12.00
218.8	12.5	656.3	12.50
227.5	13.0	682.5	13.00
236.3	13.5	708.8	13.50
245.0	14.0	735.0	14.00
253.8	14.5	761.3	14.50
262.5	15.0	787.5	15.00
271.3	15.5	813.8	15.50
280.0	16.0	840.0	16.00
288.8	16.5	866.3	16.50
297.5	17.0	892.5	17.00
306.3	17.5	918.8	17.50
315.0	18.0	945.0	18.00
323.8	18.5	971.3	18.50

Mt. Sac Uses this columns

Lecture		Lab	
18 hours = 1 unit		**54 hours = 1 unit**	
Hours	Units	Hours	Units
9	0.5	27	0.5
18	1.0	54	1.0
27	1.5	81	1.5
36	2.0	108	2.0
45	2.5	135	2.5
54	3.0	162	3.0
63	3.5	189	3.5
72	4.0	216	4.0
81	4.5	243	4.5
90	5.0	270	5.0
99	5.5	297	5.5
108	6.0	324	6.0
117	6.5	351	6.5
126	7.0	378	7.0
135	7.5	405	7.5
144	8.0	432	8.0
153	8.5	459	8.5
162	9.0	486	9.0
171	9.5	513	9.5
180	10.0	540	10.0
189	10.5	567	10.5
198	11.0	594	11.0
207	11.5	621	11.5
216	12.0	648	12.0
225	12.5	675	12.5
234	13.0	702	13.0
243	13.5	729	13.5
252	14.0	756	14.0
261	14.5	783	14.5
270	15.0	810	15.0
279	15.5	837	15.5
288	16.0	864	16.0
297	16.5	891	16.5
306	17.0	918	17.0
315	17.5	945	17.5
324	18.0	972	18.0
333	18.5	999	18.5

7/23/2014

CCCCO Worksheet

CARNEGIE UNITS - SEMESTER

Lecture		Lab		Lecture		Lab	
16 hours = 1 unit		48 hours = 1 unit		17 hours = 1 unit		51 hours = 1 unit	
Hours	Units	Hours	Units	Hours	Units	Hours	Units
8	0.5	24	0.5	8.5	0.5	25.5	0.5
16	1.0	48	1.0	17	1.0	51	1.0
24	1.5	72	1.5	25.5	1.5	76.5	1.5
32	2.0	96	2.0	34	2.0	102	2.0
40	2.5	120	2.5	42.5	2.5	127.5	2.5
48	3.0	144	3.0	51	3.0	153	3.0
56	3.5	168	3.5	59.5	3.5	178.5	3.5
64	4.0	192	4.0	68	4.0	204	4.0
72	4.5	216	4.5	76.5	4.5	229.5	4.5
80	5.0	240	5.0	85	5.0	255	5.0
88	5.5	264	5.5	93.5	5.5	280.5	5.5
96	6.0	288	6.0	102	6.0	306	6.0
104	6.5	312	6.5	110.5	6.5	331.5	6.5
112	7.0	336	7.0	119	7.0	357	7.0
120	7.5	360	7.5	127.5	7.5	382.5	7.5
128	8.0	384	8.0	136	8.0	408	8.0
136	8.5	408	8.5	144.5	8.5	433.5	8.5
144	9.0	432	9.0	153	9.0	459	9.0
152	9.5	456	9.5	161.5	9.5	484.5	9.5
160	10.0	480	10.0	170	10.0	510	10.0
168	10.5	504	10.5	178.5	10.5	535.5	10.5
176	11.0	528	11.0	187	11.0	561	11.0
184	11.5	552	11.5	195.5	11.5	586.5	11.5
192	12.0	576	12.0	204	12.0	612	12.0
200	12.5	600	12.5	212.5	12.5	637.5	12.5
208	13.0	624	13.0	221	13.0	663	13.0
216	13.5	648	13.5	229.5	13.5	688.5	13.5
224	14.0	672	14.0	238	14.0	714	14.0
232	14.5	696	14.5	246.5	14.5	739.5	14.5
240	15.0	720	15.0	255	15.0	765	15.0
248	15.5	744	15.5	263.5	15.5	790.5	15.5
256	16.0	768	16.0	272	16.0	816	16.0
264	16.5	792	16.5	280.5	16.5	841.5	16.5
272	17.0	816	17.0	289	17.0	867	17.0
280	17.5	840	17.5	297.5	17.5	892.5	17.5
288	18.0	864	18.0	306	18.0	918	18.0
296	18.5	888	18.5	314.5	18.5	943.5	18.5

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CCCCO Worksheet

CARNEGIE UNITS - QUARTER

Lecture		Lab		Lecture		Lab	
11 hours = 1 unit		33 hours = 1 unit		12 hours = 1 unit		36 hours = 1 unit	
Hours	Units	Hours	Units	Hours	Units	Hours	Units
5.5	0.5	16.5	0.5	6	0.500	18	0.5
11	1.0	33	1.0	12	1.000	36	1.0
16.5	1.5	49.5	1.5	18	1.500	54	1.5
22	2.0	66	2.0	24	2.000	72	2.0
27.5	2.5	82.5	2.5	30	2.500	90	2.5
33	3.0	99	3.0	36	3.000	108	3.0
38.5	3.5	115.5	3.5	42	3.500	126	3.5
44	4.0	132	4.0	48	4.000	144	4.0
49.5	4.5	148.5	4.5	54	4.500	162	4.5
55	5.0	165	5.0	60	5.000	180	5.0
60.5	5.5	181.5	5.5	66	5.500	198	5.5
66	6.0	198	6.0	72	6.000	216	6.0
71.5	6.5	214.5	6.5	78	6.500	234	6.5
77	7.0	231	7.0	84	7.000	252	7.0
82.5	7.5	247.5	7.5	90	7.500	270	7.5
88	8.0	264	8.0	96	8.000	288	8.0
93.5	8.5	280.5	8.5	102	8.500	306	8.5
99	9.0	297	9.0	108	9.000	324	9.0
104.5	9.5	313.5	9.5	114	9.500	342	9.5
110	10.0	330	10.0	120	10.000	360	10.0
115.5	10.5	346.5	10.5	126	10.500	378	10.5
121	11.0	363	11.0	132	11.000	396	11.0
126.5	11.5	379.5	11.5	138	11.500	414	11.5
132	12.0	396	12.0	144	12.000	432	12.0
137.5	12.5	412.5	12.5	150	12.500	450	12.5
143	13.0	429	13.0	156	13.000	468	13.0
148.5	13.5	445.5	13.5	162	13.500	486	13.5
154	14.0	462	14.0	168	14.000	504	14.0
159.5	14.5	478.5	14.5	174	14.500	522	14.5
165	15.0	495	15.0	180	15.000	540	15.0
170.5	15.5	511.5	15.5	186	15.500	558	15.5
176	16.0	528	16.0	192	16.000	576	16.0
181.5	16.5	544.5	16.5	198	16.500	594	16.5
187	17.0	561	17.0	204	17.000	612	17.0
192.5	17.5	577.5	17.5	210	17.500	630	17.5
198	18.0	594	18.0	216	18.000	648	18.0

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CCCCO Worksheet

Regulations for the California Community College Credit Hour (Unit)

Title 5 - § 55002.5 (a) - Credit Hour

> One credit hour of community college work (one unit of credit) requires a minimum of 48 hours of lecture, study, or laboratory work at colleges operating on the semester system or 33 hours of lecture, study, or laboratory work at colleges operating on the quarter system.

Program and Course Approval Handbook (PCAH), 5th Edition, September 2013, page 80

> "In practice, the number of hours varies among institutions, but is generally within the range of 48-54 hours per unit for colleges on the semester system. For each hour of lecture required, it is assumed that students will be required to spend an additional two hours of study outside of class. The number of units awarded for laboratory courses is generally based on the number of hours of laboratory."

Title 5 - § 55002.5 - Unit size

> (c) The amount of credit awarded shall be adjusted in proportion to the number of hours of lecture, study, or laboratory work in half unit increments.
> (d) A district may elect to adjust the amount of credit awarded in proportion to the number of hours of lecture, study, or laboratory in increments of less than one half unit.

PCAH - Homework for laboratory classes, page 81

> "The college may award one unit of lab credit for only two hours per week of hands-on instruction/activity as long as the instructor assigns one hour per week of out-of class study. There is no prohibition against this practice; however, it must be used with caution, particularly in regard to transferrable laboratory classes."

Title 5 - § 58050 (a) - Conditions for Claiming Attendance

> The following conditions must be met in order for attendance of students enrolled in a course to qualify for state apportionment: (6) The students must be under the immediate supervision of an employee of the district; unless otherwise provided by law. (7) The employee of the district must hold valid and unrevoked credentials or be employed pursuant to minimum qualifications adopted by the Board of Governors or equivalencies pursuant to section 53430 authorizing the employee to render service in the capacity and during the period in which the employee served.

Title 5 - § 58051 (a)(1) - Method for Computing Full-Time Equivalent Student (FTES)

> Except as otherwise provided, in computing the full-time equivalent student of a community college district, there shall be included only the attendance of students while they are engaged in educational activities required of students and while they are under the immediate supervision and control of an academic employee of the district authorized to render service in the capacity and during the period in which he or she served.

> Note: Students can be awarded unit credit for homework; however, homework hours are not eligible for apportionment.

CCCCO Worksheet

1) Select the appropriate chart reflecting the term used by your college, whether semester or quarter.

2) Select the appropriate hour/unit conversion used by your college or program (16/48, 17/51, 17.5/52.5, 18/54, 11/33, or 12/36.

3) Calculate the appropriate units for lecture and/or laboratory. The tables are organized in one-half unit increments. Colleges can use smaller increments if approved by their local Board of Trustees.

4) Units increase when the next increment is reached. For example on the 18/54 table, lecture units are calculated as 1/2 unit between 9 hours and 17.5 hours; and as one unit between 18 hours and 26.5 hours.

5) Work Experience units are not calculated using this chart. WEX units are awarded based on the number of paid (75 hours = one semester unit) or unpaid hours (60 hours = one semester unit)
   Title 5 - § 55256.5 - Work Experience Credit

6) These are the only permitted methods and formulas for calculating units in the California Community Colleges. There are allowable locally derived formulas or exceptions for specific disciplines.

TOP Code – CIP Code Crosswalk

TOP Code	TOP Code Title	CIP Code	CIP Code (2)	CIP Title	Change or Addition
0101.00	Agriculture Technology and Sciences, General	010102	01.0102	Agribusiness/Agricultural Business Operations.	
0102.00	Animal Science	010302	01.0302	Animal/Livestock Husbandry and Production.	
0102.00	Animal Science	010505	01.0505	Animal Training.	
0102.10	Veterinary Technician (Licensed)	018201	01.8201	Veterinary Administrative Services, General.	New 2020 CIP code
0102.10	Veterinary Technician (Licensed)	018202	01.8202	Veterinary Office Management/Administration.	New 2020 CIP code
0102.10	Veterinary Technician (Licensed)	018203	01.8203	Veterinary Reception/Receptionist.	New 2020 CIP code
0102.10	Veterinary Technician (Licensed)	018204	01.8204	Veterinary Administrative/Executive Assistant and Veterinary Secretary.	New 2020 CIP code
0102.10	Veterinary Technician (Licensed)	018301	01.8301	Veterinary/Animal Health Technology/Technician and Veterinary Assistant.	Moved from 51.0808
0102.20	Artificial Inseminator (Licensed)	010302	01.0302	Animal/Livestock Husbandry and Production.	
0102.20	Artificial Inseminator (Licensed)	018301	01.8301	Veterinary/Animal Health Technology/Technician and Veterinary Assistant.	Moved from 51.0808
0102.30	Dairy Science	010306	01.0306	Dairy Husbandry and Production.	
0102.40	Equine Science	010307	01.0307	Horse Husbandry/Equine Science and Management.	
0102.40	Equine Science	010509	01.0509	Farrier Science.	New 2020 CIP code
0103.00	Plant Science	010304	01.0304	Crop Production.	
0103.10	Agricultural Pest Control Adviser and Operator (Licensed)	011105	01.1105	Plant Protection and Integrated Pest Management.	
0104.00	Viticulture, Enology and Wine Business	011003	01.1003	Brewing Science.	New 2020 CIP code
0104.00	Viticulture, Enology and Wine Business	011004	01.1004	Viticulture and Enology.	Moved from 01.0309
0104.00	Viticulture, Enology and Wine Business	011005	01.1005	Zymology/Fermentation Science.	New 2020 CIP code
0104.00	Viticulture, Enology and Wine Business	120510	12.0510	Wine Steward/Sommelier.	
0109.00	Horticulture	010601	01.0601	Applied Horticulture/Horticulture Operations, General.	
0109.10	Landscape Design and Maintenance	010207	01.0207	Irrigation Management Technology/Technician.	New 2020 CIP code
0109.10	Landscape Design and Maintenance	010605	01.0605	Landscaping and Groundskeeping.	
0109.20	Floriculture / Floristry	010608	01.0608	Floriculture/Floristry Operations and Management.	
0109.30	Nursery Technology	010606	01.0606	Plant Nursery Operations and Management.	
0109.40	Turfgrass Technology	010607	01.0607	Turf and Turfgrass Management.	
0109.40	Turfgrass Technology	310302	31.0302	Golf Course Operation and Grounds Management.	
0112.00	Agriculture Business, Sales and Service	010102	01.0102	Agribusiness/Agricultural Business Operations.	
0112.00	Agriculture Business, Sales and Service	010104	01.0104	Farm/Farm and Ranch Management.	
0112.00	Agriculture Business, Sales and Service	010105	01.0105	Agricultural/Farm Supplies Retailing and Wholesaling.	

0112.00	Agriculture Business, Sales and Service	010106	01.0106 Agricultural Business Technology/Technician.	Added and New Title
0113.00	Food Processing and Related Technologies	010401	01.0401 Agricultural and Food Products Processing.	
0113.00	Food Processing and Related Technologies	011002	01.1002 Food Technology and Processing.	
0113.00	Food Processing and Related Technologies	011003	01.1003 Brewing Science.	New 2020 CIP code
0113.00	Food Processing and Related Technologies	011005	01.1005 Zymology/Fermentation Science.	New 2020 CIP code
0114.00	Forestry	030501	03.0501 Forestry, General.	
0114.00	Forestry	030509	03.0509 Wood Science and Wood Products/Pulp and Paper Technology/Technician.	Added and New Title
0114.00	Forestry	030511	03.0511 Forest Technology/Technician.	
0114.00	Forestry	030599	03.0599 Forestry, Other.	
0115.00	Natural Resources	010308	01.0308 Agroecology and Sustainable Agriculture.	
0115.00	Natural Resources	030101	03.0101 Natural Resources/Conservation, General.	
0115.10	Parks and Outdoor Recreation	310301	31.0301 Parks, Recreation and Leisure Facilities Management, General.	
0115.20	Wildlife and Fisheries	030601	03.0601 Wildlife, Fish and Wildlands Science and Management.	
0116.00	Agricultural Power Equipment Technology	010201	01.0201 Agricultural Mechanization, General.	
0116.00	Agricultural Power Equipment Technology	010204	01.0204 Agricultural Power Machinery Operation.	
0116.00	Agricultural Power Equipment Technology	010205	01.0205 Agricultural Mechanics and Equipment/Machine Technology/Technician.	New Title
0199.00	Other Agriculture and Natural Resources	011399	01.1399 Agriculture/Veterinary Preparatory Programs, Other.	New 2020 CIP code
0199.00	Other Agriculture and Natural Resources	019999	01.9999 Agricultural/Animal/Plant/Veterinary Science and Related Fields, Other.	New Title
0201.00	Architecture and Architectural Technology	040200	04.0200 Pre-Architecture Studies.	New 2020 CIP code
0201.00	Architecture and Architectural Technology	040202	04.0202 Architectural Design.	New 2020 CIP code
0201.00	Architecture and Architectural Technology	040401	04.0401 Environmental Design/Architecture.	
0201.00	Architecture and Architectural Technology	040901	04.0901 Architectural Technology/Technician.	
0201.00	Architecture and Architectural Technology	150101	15.0101 Architectural Engineering Technologies/Technicians.	New Title
0201.10	Landscape Architecture (Transfer)	040601	04.0601 Landscape Architecture.	
0299.00	Other Architecture and Environmental Design	040299	04.0299 Architecture, Other.	New 2020 CIP code
0299.00	Other Architecture and Environmental Design	049999	04.9999 Architecture and Related Services, Other.	
0301.00	Environmental Science	030104	03.0104 Environmental Science.	
0301.00	Environmental Science	303501	30.3501 Climate Science.	New 2020 CIP code
0301.00	Environmental Science	304101	30.4101 Environmental Geosciences.	New 2020 CIP code
0302.00	Environmental Studies	030103	03.0103 Environmental Studies.	
0302.00	Environmental Studies	030209	03.0209 Energy and Environmental Policy.	New 2020 CIP code
0302.00	Environmental Studies	304401	30.4401 Geography and Environmental Studies.	New 2020 CIP code
0303.00	Environmental Technology	150507	15.0507 Environmental/Environmental Engineering Technology/Technician.	New Title
0303.00	Environmental Technology	150508	15.0508 Hazardous Materials Management and Waste Technology/Technician.	

0399.00	Environmental Sciences and Technologies, Other	039999	03.9999 Natural Resources and Conservation, Other.
0401.00	Biology, General	260101	26.0101 Biology/Biological Sciences, General.
0402.00	Botany, General	260301	26.0301 Botany/Plant Biology.
0403.00	MicroBiology	260499	26.0499 Cell/Cellular Biology and Anatomical Sciences, Other.
0403.00	MicroBiology	260502	26.0502 Microbiology, General.
0407.00	Zoology, General	260701	26.0701 Zoology/Animal Biology.
0408.00	Natural History	261303	26.1303 Evolutionary Biology.
0410.00	Anatomy and Physiology	260901	26.0901 Physiology, General.
0430.00	Biotechnology and Biomedical Technology	150401	15.0401 Biomedical Technology/Technician.
0430.00	Biotechnology and Biomedical Technology	261104	26.1104 Computational Biology.
0430.00	Biotechnology and Biomedical Technology	410101	41.0101 Biology/Biotechnology Technology/Technician.	New Title
0499.00	Other Biological Sciences	269999	26.9999 Biological and Biomedical Sciences, Other.
0501.00	Business and Commerce, General	307102	30.7102 Business Analytics.	New 2020 CIP code
0501.00	Business and Commerce, General	520101	52.0101 Business/Commerce, General.
0501.00	Business and Commerce, General	520201	52.0201 Business Administration and Management, General.	Added
0502.00	Accounting	520301	52.0301 Accounting.
0502.00	Accounting	520302	52.0302 Accounting Technology/Technician and Bookkeeping.
0502.10	Tax Studies	521601	52.1601 Taxation.
0504.00	Banking and Finance	520803	52.0803 Banking and Financial Support Services.
0504.00	Banking and Finance	520810	52.0810 Financial Risk Management.	New 2020 CIP code
0504.00	Banking and Finance	520801	52.0801 Finance, General.	Added
0505.00	Business Administration	307102	30.7102 Business Analytics.	New 2020 CIP code
0505.00	Business Administration	520201	52.0201 Business Administration and Management, General.
0506.00	Business Management	307102	30.7102 Business Analytics.	New 2020 CIP code
0506.00	Business Management	520201	52.0201 Business Administration and Management, General.
0506.00	Business Management	520701	52.0701 Entrepreneurship/Entrepreneurial Studies.
0506.30	Management Development and Supervision	520204	52.0204 Office Management and Supervision.
0506.30	Management Development and Supervision	520205	52.0205 Operations Management and Supervision.
0506.40	Small Business and Entrepreneurship	520701	52.0701 Entrepreneurship/Entrepreneurial Studies.
0506.40	Small Business and Entrepreneurship	520703	52.0703 Small Business Administration/Management.
0506.40	Small Business and Entrepreneurship	520704	52.0704 Social Entrepreneurship.	New 2020 CIP code
0506.50	Retail Store Operations and Management	520212	52.0212 Retail Management.
0506.50	Retail Store Operations and Management	521803	52.1803 Retailing and Retail Operations.
0508.00	International Business and Trade	521101	52.1101 International Business/Trade/Commerce.

0509.00	Marketing and Distribution	521401	52.1401 Marketing/Marketing Management, General.	
0509.00	Marketing and Distribution	521404	52.1404 Digital Marketing.	New 2020 CIP code
0509.00	Marketing and Distribution	521801	52.1801 Sales, Distribution and Marketing Operations, General.	
0509.10	Advertising	090903	09.0903 Advertising.	
0509.20	Purchasing	520202	52.0202 Purchasing, Procurement/Acquisitions and Contracts Management.	
0509.20	Purchasing	521802	52.1802 Merchandising and Buying Operations.	
0509.40	Sales and Salesmanship	521804	52.1804 Selling Skills and Sales Operations.	
0509.60	Display	521899	52.1899 General Merchandising, Sales and Related Marketing Operations, Other.	
0509.70	E-Commerce (Business emphasis)	520208	52.0208 E-Commerce/Electronic Commerce.	
0509.70	E-Commerce (Business emphasis)	521404	52.1404 Digital Marketing.	New 2020 CIP code
0510.00	Logistics and Materials Transportation	499999	49.9999 Transportation and Materials Moving, Other.	
0510.00	Logistics and Materials Transportation	520203	52.0203 Logistics, Materials and Supply Chain Management.	
0511.00	Real Estate	521501	52.1501 Real Estate.	
0511.10	Escrow	521501	52.1501 Real Estate.	
0512.00	Insurance	520215	52.0215 Risk Management.	New 2020 CIP code
0512.00	Insurance	521701	52.1701 Insurance.	
0514.00	Office Technology/Office Computer Applications	110601	11.0601 Data Entry/Microcomputer Applications, General.	
0514.00	Office Technology/Office Computer Applications	520401	52.0401 Administrative Assistant and Secretarial Science, General.	
0514.00	Office Technology/Office Computer Applications	520407	52.0407 Business/Office Automation/Technology/Data Entry.	
0514.00	Office Technology/Office Computer Applications	520408	52.0408 General Office Occupations and Clerical Services.	
0514.10	Legal Office Technology	220301	22.0301 Legal Administrative Assistant/Secretary.	
0514.20	Medical Office Technology	510710	51.0710 Medical Office Assistant/Specialist.	
0514.20	Medical Office Technology	510712	51.0712 Medical Reception/Receptionist.	
0514.20	Medical Office Technology	510716	51.0716 Medical Administrative/Executive Assistant and Medical Secretary.	
0514.30	Court Reporting	220303	22.0303 Court Reporting and Captioning/Court Reporter.	New Title
0514.30	Court Reporting	220305	22.0305 Scopist.	New 2020 CIP code
0514.40	Office Management	520204	52.0204 Office Management and Supervision.	
0516.00	Labor and Industrial Relations	521002	52.1002 Labor and Industrial Relations.	
0518.00	Customer Service	520411	52.0411 Customer Service Support/Call Center/Teleservice Operation.	
0599.00	Other Business and Management	520299	52.0299 Business Administration, Management and Operations, Other.	
0599.00	Other Business and Management	529999	52.9999 Business, Management, Marketing and Related Support Services, Other.	
0601.00	Media and Communications, General	090100	09.0100 Communication, General.	
0601.00	Media and Communications, General	090909	09.0909 Communication Management and Strategic Communications.	New 2020 CIP code
0602.00	Journalism	090401	09.0401 Journalism.	

0602.00	Journalism	090405	09.0405 Business and Economic Journalism.	New 2020 CIP code
0602.00	Journalism	090406	09.0406 Cultural Journalism.	New 2020 CIP code
0602.00	Journalism	090407	09.0407 Science/Health/Environmental Journalism.	New 2020 CIP code
0604.00	Radio and Television	090701	09.0701 Radio and Television.	
0604.00	Radio and Television	100202	10.0202 Radio and Television Broadcasting Technology/Technician.	New Title
0604.10	Radio	090701	09.0701 Radio and Television.	
0604.10	Radio	100202	10.0202 Radio and Television Broadcasting Technology/Technician.	New Title
0604.20	Television (including combined TV/Film/Video)	090701	09.0701 Radio and Television.	
0604.20	Television (including combined TV/Film/Video)	100202	10.0202 Radio and Television Broadcasting Technology/Technician.	New Title
0604.30	Broadcast Journalism	090402	09.0402 Broadcast Journalism.	
0604.30	Broadcast Journalism	100202	10.0202 Radio and Television Broadcasting Technology/Technician.	New Title
0606.00	Public Relations	090900	09.0900 Public Relations, Advertising and Applied Communication.	
0606.00	Public Relations	090909	09.0909 Communication Management and Strategic Communications.	New 2020 CIP code
0607.00	Technical Communication	231303	23.1303 Professional, Technical, Business and Scientific Writing.	
0610.00	Mass Communications	090102	09.0102 Mass Communication/Media Studies.	
0610.00	Mass Communications	100105	10.0105 Communications Technology/Technician.	
0612.00	Film Studies	500601	50.0601 Film/Cinema/Media Studies.	New Title
0612.10	Film History and Criticism	500601	50.0601 Film/Cinema/Media Studies.	New Title
0612.20	Film Production	500602	50.0602 Cinematography and Film/Video Production.	
0612.20	Film Production	500699	50.0699 Film/Video and Photographic Arts, Other.	
0614.00	Digital Media	090702	09.0702 Digital Communication and Media/Multimedia.	
0614.00	Digital Media	100303	10.0303 Prepress/Desktop Publishing and Digital Imaging Design.	
0614.00	Digital Media	500102	50.0102 Digital Arts.	
0614.10	Multimedia	100304	10.0304 Animation, Interactive Technology, Video Graphics and Special Effects.	
0614.20	Electronic Game Design	100304	10.0304 Animation, Interactive Technology, Video Graphics and Special Effects.	
0614.20	Electronic Game Design	110204	11.0204 Computer Game Programming.	New 2020 CIP code
0614.20	Electronic Game Design	500411	50.0411 Game and Interactive Media Design.	
0614.30	Website Design and Development	110801	11.0801 Web Page, Digital/Multimedia and Information Resources Design.	New Title
0614.40	Animation	100304	10.0304 Animation, Interactive Technology, Video Graphics and Special Effects.	
0614.50	Desktop Publishing	100303	10.0303 Prepress/Desktop Publishing and Digital Imaging Design.	
0614.60	Computer Graphics and Digital Imagery	110803	11.0803 Computer Graphics.	
0614.60	Computer Graphics and Digital Imagery	110899	11.0899 Computer Software and Media Applications, Other.	
0699.00	Other Media and Communications	099999	09.9999 Communication, Journalism and Related Programs, Other.	
0701.00	Information Technology, General	110101	11.0101 Computer and Information Sciences, General.	

0701.00	Information Technology, General	110199	11.0199 Computer and Information Sciences, Other.	
0701.00	Information Technology, General	110201	11.0201 Computer Programming/Programmer, General.	
0701.00	Information Technology, General	151202	15.1202 Computer/Computer Systems Technology/Technician.	New Title
0702.00	Computer Information Systems	110101	11.0101 Computer and Information Sciences, General.	
0702.00	Computer Information Systems	110103	11.0103 Information Technology.	
0702.00	Computer Information Systems	110501	11.0501 Computer Systems Analysis/Analyst.	
0702.00	Computer Information Systems	151202	15.1202 Computer/Computer Systems Technology/Technician.	New Title
0702.00	Computer Information Systems	307001	30.7001 Data Science, General.	New 2020 CIP code
0702.00	Computer Information Systems	307101	30.7101 Data Analytics, General.	New 2020 CIP code
0702.00	Computer Information Systems	307103	30.7103 Data Visualization.	New 2020 CIP code
0702.10	Software Applications	110301	11.0301 Data Processing and Data Processing Technology/Technician.	
0702.10	Software Applications	110601	11.0601 Data Entry/Microcomputer Applications, General.	
0702.10	Software Applications	110801	11.0801 Web Page, Digital/Multimedia and Information Resources Design.	New Title
0702.10	Software Applications	110899	11.0899 Computer Software and Media Applications, Other.	
0706.00	Computer Science (Transfer)	110101	11.0101 Computer and Information Sciences, General.	
0706.00	Computer Science (Transfer)	110701	11.0701 Computer Science.	
0706.00	Computer Science (Transfer)	303001	30.3001 Computational Science.	
0706.00	Computer Science (Transfer)	307001	30.7001 Data Science, General.	New 2020 CIP code
0706.00	Computer Science (Transfer)	307101	30.7101 Data Analytics, General.	New 2020 CIP code
0706.00	Computer Science (Transfer)	307103	30.7103 Data Visualization.	New 2020 CIP code
0707.00	Computer Software Development	110201	11.0201 Computer Programming/Programmer, General.	
0707.00	Computer Software Development	151204	15.1204 Computer Software Technology/Technician.	
0707.00	Computer Software Development	307001	30.7001 Data Science, General.	New 2020 CIP code
0707.00	Computer Software Development	307101	30.7101 Data Analytics, General.	New 2020 CIP code
0707.10	Computer Programming	110201	11.0201 Computer Programming/Programmer, General.	
0707.10	Computer Programming	110202	11.0202 Computer Programming, Specific Applications.	
0707.10	Computer Programming	110203	11.0203 Computer Programming, Vendor/Product Certification.	
0707.10	Computer Programming	110204	11.0204 Computer Game Programming.	New 2020 CIP code
0707.10	Computer Programming	110205	11.0205 Computer Programming, Specific Platforms.	New 2020 CIP code
0707.10	Computer Programming	110299	11.0299 Computer Programming, Other.	
0707.10	Computer Programming	110501	11.0501 Computer Systems Analysis/Analyst.	
0707.10	Computer Programming	110701	11.0701 Computer Science.	
0707.10	Computer Programming	307001	30.7001 Data Science, General.	New 2020 CIP code
0707.10	Computer Programming	307101	30.7101 Data Analytics, General.	New 2020 CIP code

0707.10	Computer Programming	307103	30.7103	Data Visualization.	New 2020 CIP code
0707.20	Database Design and Administration	110802	11.0802	Data Modeling/Warehousing and Database Administration.	
0707.20	Database Design and Administration	307001	30.7001	Data Science, General.	New 2020 CIP code
0707.20	Database Design and Administration	307101	30.7101	Data Analytics, General.	New 2020 CIP code
0707.30	Computer Systems Analysis	110501	11.0501	Computer Systems Analysis/Analyst.	
0708.00	Computer Infrastructure and Support	110901	11.0901	Computer Systems Networking and Telecommunications.	
0708.00	Computer Infrastructure and Support	110902	11.0902	Cloud Computing.	New 2020 CIP code
0708.00	Computer Infrastructure and Support	111001	11.1001	Network and System Administration/Administrator.	
0708.00	Computer Infrastructure and Support	111002	11.1002	System, Networking and LAN/WAN Management/Manager.	
0708.00	Computer Infrastructure and Support	111003	11.1003	Computer and Information Systems Security/Auditing/Information Assurance. New Title	
0708.00	Computer Infrastructure and Support	111006	11.1006	Computer Support Specialist.	
0708.10	Computer Networking	110901	11.0901	Computer Systems Networking and Telecommunications.	
0708.10	Computer Networking	110902	11.0902	Cloud Computing.	New 2020 CIP code
0708.10	Computer Networking	111001	11.1001	Network and System Administration/Administrator.	
0708.10	Computer Networking	111002	11.1002	System, Networking and LAN/WAN Management/Manager.	
0708.10	Computer Networking	111003	11.1003	Computer and Information Systems Security/Auditing/Information Assurance. New Title	
0708.20	Computer Support	111003	11.1003	Computer and Information Systems Security/Auditing/Information Assurance. New Title	
0708.20	Computer Support	111006	11.1006	Computer Support Specialist.	
0709.00	World Wide Web Administration	111003	11.1003	Computer and Information Systems Security/Auditing/Information Assurance. New Title	
0709.00	World Wide Web Administration	111004	11.1004	Web/Multimedia Management and Webmaster.	
0709.10	E-Commerce (Technology emphasis)	110801	11.0801	Web Page, Digital/Multimedia and Information Resources Design.	New Title
0709.10	E-Commerce (Technology emphasis)	520208	52.0208	E-Commerce/Electronic Commerce.	
0799.00	Other Information Technology	110899	11.0899	Computer Software and Media Applications, Other.	
0799.00	Other Information Technology	110999	11.0999	Computer Systems Networking and Telecommunications, Other.	New 2020 CIP code
0799.00	Other Information Technology	119999	11.9999	Computer and Information Sciences and Support Services, Other.	
0801.00	Education, General	130101	13.0101	Education, General.	
0801.00	Education, General	130401	13.0401	Educational Leadership and Administration, General.	
0801.00	Education, General	131202	13.1202	Elementary Education and Teaching.	
0801.00	Education, General	131205	13.1205	Secondary Education and Teaching.	
0801.00	Education, General	131206	13.1206	Teacher Education, Multiple Levels.	
0801.00	Education, General	131207	13.1207	Montessori Teacher Education.	
0801.00	Education, General	131208	13.1208	Waldorf/Steiner Teacher Education.	
0801.00	Education, General	131209	13.1209	Kindergarten/Preschool Education and Teaching.	
0802.00	Educational Aide (Teacher Assistant)	131501	13.1501	Teacher Assistant/Aide.	

0802.10	Educational Aide (Teacher Assistant), Bilingual	130201	13.0201 Bilingual and Multilingual Education.	
0802.10	Educational Aide (Teacher Assistant), Bilingual	131501	13.1501 Teacher Assistant/Aide.	
0809.00	Special Education	131001	13.1001 Special Education and Teaching, General.	New Title
0809.00	Special Education	131017	13.1017 Education/Teaching of Individuals in Elementary Special Education Programs.	
0835.00	Physical Education	310501	31.0501 Sports, Kinesiology and Physical Education/Fitness, General.	New Title
0835.10	Physical Fitness and Body Movement	310501	31.0501 Sports, Kinesiology and Physical Education/Fitness, General.	New Title
0835.20	Fitness Trainer	310507	31.0507 Physical Fitness Technician.	
0835.50	Intercollegiate Athletics	310501	31.0501 Sports, Kinesiology and Physical Education/Fitness, General.	New Title
0835.60	Coaching	310504	31.0504 Sport and Fitness Administration/Management.	
0835.70	Aquatics and Lifesaving	319999	31.9999 Parks, Recreation, Leisure, Fitness and Kinesiology, Other.	New Title
0835.80	Adapted Physical Education	310501	31.0501 Sports, Kinesiology and Physical Education/Fitness, General.	New Title
0835.80	Adapted Physical Education	512309	51.2309 Therapeutic Recreation/Recreational Therapy.	
0836.00	Recreation	310101	31.0101 Parks, Recreation and Leisure Studies.	
0836.10	Recreation Assistant	310101	31.0101 Parks, Recreation and Leisure Studies.	
0836.10	Recreation Assistant	310301	31.0301 Parks, Recreation and Leisure Facilities Management, General.	
0837.00	Health Education	310501	31.0501 Sports, Kinesiology and Physical Education/Fitness, General.	New Title
0837.00	Health Education	510001	51.0001 Health and Wellness, General.	
0839.00	Industrial Arts (Transfer)	131309	13.1309 Technology Teacher Education/Industrial Arts Teacher Education.	
0850.00	Sign Language	161601	16.1601 American Sign Language (ASL).	
0850.10	Sign Language Interpreting	161603	16.1603 Sign Language Interpretation and Translation.	
0850.10	Sign Language Interpreting	220304	22.0304 Court Interpreter.	New 2020 CIP code
0860.00	Educational Technology	130413	13.0413 Education Entrepreneurship.	New 2020 CIP code
0860.00	Educational Technology	130501	13.0501 Educational/Instructional Technology.	
0899.00	Other Education	139999	13.9999 Education, Other.	
0901.00	Engineering, General (requires Calculus) (Transfer)	140101	14.0101 Engineering, General.	
0901.00	Engineering, General (requires Calculus) (Transfer)	140102	14.0102 Pre-Engineering.	
0924.00	Engineering Technology, General (requires Trigonometry)	140103	14.0103 Applied Engineering.	New 2020 CIP code
0924.00	Engineering Technology, General (requires Trigonometry)	150000	15.0000 Engineering Technologies/Technicians, General.	New Title
0924.00	Engineering Technology, General (requires Trigonometry)	150001	15.0001 Applied Engineering Technologies/Technicians.	New 2020 CIP code
0924.00	Engineering Technology, General (requires Trigonometry)	150201	15.0201 Civil Engineering Technologies/Technicians.	New Title
0924.00	Engineering Technology, General (requires Trigonometry)	150805	15.0805 Mechanical/Mechanical Engineering Technology/Technician.	New Title
0934.00	Electronics and Electric Technology	144701	14.4701 Electrical and Computer Engineering.	New 2020 CIP code
0934.00	Electronics and Electric Technology	150303	15.0303 Electrical, Electronic and Communications Engineering Technology/Technician	New Title
0934.00	Electronics and Electric Technology	150399	15.0399 Electrical/Electronic Engineering Technologies/Technicians, Other.	New Title

0934.00	Electronics and Electric Technology	151702	15.1702 Power Plant Technology/Technician.	New 2020 CIP code
0934.00	Electronics and Electric Technology	151703	15.1703 Solar Energy Technology/Technician.	Moved from 15.0505
0934.00	Electronics and Electric Technology	470101	47.0101 Electrical/Electronics Equipment Installation and Repair Technology/Technicia	New Title
0934.10	Computer Electronics	150306	15.0306 Integrated Circuit Design Technology/Technician.	New Title
0934.10	Computer Electronics	151201	15.1201 Computer Engineering Technology/Technician.	
0934.10	Computer Electronics	151203	15.1203 Computer Hardware Technology/Technician.	
0934.10	Computer Electronics	470104	47.0104 Computer Installation and Repair Technology/Technician.	
0934.20	Industrial Electronics	150612	15.0612 Industrial Technology/Technician.	
0934.20	Industrial Electronics	470105	47.0105 Industrial Electronics Technology/Technician.	
0934.30	Telecommunications Technology	150305	15.0305 Telecommunications Technology/Technician.	New Title
0934.30	Telecommunications Technology	470103	47.0103 Communications Systems Installation and Repair Technology/Technician.	
0934.40	Electrical Systems and Power Transmission	460301	46.0301 Electrical and Power Transmission Installation/Installer, General.	
0934.60	Biomedical Instrumentation	150401	15.0401 Biomedical Technology/Technician.	
0934.70	Electron Microscopy	150404	15.0404 Instrumentation Technology/Technician.	
0934.70	Electron Microscopy	150499	15.0499 Electromechanical Technologies/Technicians, Other.	New Title
0934.80	Laser and Optical Technology	150304	15.0304 Laser and Optical Technology/Technician.	New Title
0935.00	Electro-Mechanical Technology	150403	15.0403 Electromechanical/Electromechanical Engineering Technology/Technician.	New Title
0935.00	Electro-Mechanical Technology	150407	15.0407 Mechatronics, Robotics and Automation Engineering Technology/Technician.	New 2020 CIP code
0935.00	Electro-Mechanical Technology	470105	47.0105 Industrial Electronics Technology/Technician.	
0935.10	Appliance Repair	470106	47.0106 Appliance Installation and Repair Technology/Technician.	
0936.00	Printing and Lithography	100305	10.0305 Graphic and Printing Equipment Operator, General Production.	
0936.00	Printing and Lithography	100306	10.0306 Platemaker/Imager.	
0936.00	Printing and Lithography	100307	10.0307 Printing Press Operator.	
0936.00	Printing and Lithography	100308	10.0308 Computer Typography and Composition Equipment Operator.	
0943.00	Instrumentation Technology	150404	15.0404 Instrumentation Technology/Technician.	
0945.00	Industrial Systems Technology and Maintenance	470303	47.0303 Industrial Mechanics and Maintenance Technology/Technician.	New Title
0946.00	Environmental Control Technology	150501	15.0501 Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician.	
0946.00	Environmental Control Technology	470201	47.0201 Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician.	
0946.10	Energy Systems Technology	144801	14.4801 Energy Systems Engineering, General.	New 2020 CIP code
0946.10	Energy Systems Technology	151701	15.1701 Energy Systems Technology/Technician.	Moved from 15.0503
0946.10	Energy Systems Technology	151703	15.1703 Solar Energy Technology/Technician.	Moved from 15.0505
0946.10	Energy Systems Technology	151704	15.1704 Wind Energy Technology/Technician.	New 2020 CIP code
0946.10	Energy Systems Technology	151705	15.1705 Hydroelectric Energy Technology/Technician.	New 2020 CIP code
0946.10	Energy Systems Technology	470701	47.0701 Energy Systems Installation and Repair Technology/Technician.	New 2020 CIP code

0946.10	Energy Systems Technology	470703	47.0703 Solar Energy System Installation and Repair Technology/Technician.	New 2020 CIP code
0946.10	Energy Systems Technology	470704	47.0704 Wind Energy System Installation and Repair Technology/Technician.	New 2020 CIP code
0946.10	Energy Systems Technology	470705	47.0705 Hydroelectric Energy System Installation and Repair Technology/Technician.	New 2020 CIP code
0946.10	Energy Systems Technology	470706	47.0706 Geothermal Energy System Installation and Repair Technology/Technician.	New 2020 CIP code
0947.00	Diesel Technology	470302	47.0302 Heavy Equipment Maintenance Technology/Technician.	
0947.00	Diesel Technology	470603	47.0613 Medium/Heavy Vehicle and Truck Technology/Technician.	
0947.00	Diesel Technology	470605	47.0605 Diesel Mechanics Technology/Technician.	
0947.00	Diesel Technology	490202	49.0202 Construction/Heavy Equipment/Earthmoving Equipment Operation.	
0947.20	Heavy Equipment Maintenance	010201	01.0201 Agricultural Mechanization, General.	
0947.20	Heavy Equipment Maintenance	010204	01.0204 Agricultural Power Machinery Operation.	
0947.20	Heavy Equipment Maintenance	470302	47.0302 Heavy Equipment Maintenance Technology/Technician.	
0947.30	Heavy Equipment Operation	010201	01.0201 Agricultural Mechanization, General.	
0947.30	Heavy Equipment Operation	010204	01.0204 Agricultural Power Machinery Operation.	
0947.30	Heavy Equipment Operation	490202	49.0202 Construction/Heavy Equipment/Earthmoving Equipment Operation.	
0947.40	Railroad and Light Rail Operations	490208	49.0208 Railroad and Railway Transportation.	
0947.40	Railroad and Light Rail Operations	490299	49.0299 Ground Transportation, Other.	
0947.50	Truck and Bus Driving	490205	49.0205 Truck and Bus Driver/Commercial Vehicle Operator and Instructor.	
0948.00	Automotive Technology	150807	15.0807 Motorsports Engineering Technology/Technician.	New 2020 CIP code
0948.00	Automotive Technology	470604	47.0604 Automobile/Automotive Mechanics Technology/Technician.	
0948.00	Automotive Technology	470612	47.0612 Vehicle Emissions Inspection and Maintenance Technology/Technician.	
0948.00	Automotive Technology	470617	47.0617 High Performance and Custom Engine Technician/Mechanic.	
0948.30	Motorcycle, Outboard and Small Engine Repair	470606	47.0606 Small Engine Mechanics and Repair Technology/Technician.	
0948.30	Motorcycle, Outboard and Small Engine Repair	470611	47.0611 Motorcycle Maintenance and Repair Technology/Technician.	
0948.30	Motorcycle, Outboard and Small Engine Repair	470616	47.0616 Marine Maintenance/Fitter and Ship Repair Technology/Technician.	
0948.40	Alternative Fuels and Advanced Transportation Technology	470614	47.0614 Alternative Fuel Vehicle Technology/Technician.	
0948.50	Recreational Vehicle Service	470618	47.0618 Recreation Vehicle (RV) Service Technician.	
0949.00	Automotive Collision Repair	470603	47.0603 Autobody/Collision and Repair Technology/Technician.	
0949.10	Upholstery Repair - Automotive	480303	48.0303 Upholstery/Upholsterer.	
0950.00	Aeronautical and Aviation Technology	140299	14.0299 Aerospace, Aeronautical, and Astronautical/Space Engineering, Other.	New 2020 CIP code
0950.00	Aeronautical and Aviation Technology	150801	15.0801 Aeronautical/Aerospace Engineering Technology/Technician.	
0950.00	Aeronautical and Aviation Technology	470607	47.0607 Airframe Mechanics and Aircraft Maintenance Technology/Technician.	
0950.10	Aviation Airframe Mechanics	470607	47.0607 Airframe Mechanics and Aircraft Maintenance Technology/Technician.	
0950.20	Aviation Powerplant Mechanics	470608	47.0608 Aircraft Powerplant Technology/Technician.	
0950.40	Aircraft Electronics (Avionics)	150801	15.0801 Aeronautical/Aerospace Engineering Technology/Technician.	

0950.40	Aircraft Electronics (Avionics)	470609	47.0609	Avionics Maintenance Technology/Technician.	
0950.50	Aircraft Fabrication	470607	47.0607	Airframe Mechanics and Aircraft Maintenance Technology/Technician.	
0952.00	Construction Crafts Technology	460415	46.0415	Building Construction Technology/Technician.	New Title
0952.00	Construction Crafts Technology	460415	46.0000	Construction Trades.	
0952.00	Construction Crafts Technology	522002	52.2002	Construction Project Management.	New 2020 CIP code
0952.10	Carpentry	460201	46.0201	Carpentry/Carpenter.	
0952.20	Electrical	460302	46.0302	Electrician.	
0952.20	Electrical	460303	46.0303	Lineworker.	
0952.30	Plumbing, Pipefitting and Steamfitting	460502	46.0502	Pipefitting/Pipefitter and Sprinkler Fitter.	
0952.30	Plumbing, Pipefitting and Steamfitting	460503	46.0503	Plumbing Technology/Plumber.	
0952.40	Glazing	460406	46.0406	Glazier.	
0952.50	Mill and Cabinet Work	480701	48.0701	Woodworking, General.	
0952.50	Mill and Cabinet Work	480703	48.0703	Cabinetmaking and Millwork.	
0952.60	Masonry, Tile, Cement, Lath and Plaster	460101	46.0101	Mason/Masonry.	
0952.60	Masonry, Tile, Cement, Lath and Plaster	460402	46.0402	Concrete Finishing/Concrete Finisher.	
0952.60	Masonry, Tile, Cement, Lath and Plaster	460413	46.0413	Carpet, Floor and Tile Worker.	
0952.70	Painting, Decorating and Flooring	460408	46.0408	Painting/Painter and Wall Coverer.	
0952.70	Painting, Decorating and Flooring	460413	46.0413	Carpet, Floor and Tile Worker.	
0952.80	Drywall and Insulation	460404	46.0404	Drywall Installation/Drywaller.	
0952.90	Roofing	460410	46.0410	Roofer.	
0953.00	Drafting Technology	151301	15.1301	Drafting and Design Technology/Technician, General.	
0953.00	Drafting Technology	151302	15.1302	CAD/CADD Drafting and/or Design Technology/Technician.	
0953.00	Drafting Technology	500404	50.0404	Industrial and Product Design.	
0953.10	Architectural Drafting	151303	15.1303	Architectural Drafting and Architectural CAD/CADD.	
0953.20	Civil Drafting	151304	15.1304	Civil Drafting and Civil Engineering CAD/CADD.	
0953.30	Electrical, Electronic and Electro-Mechanical Drafting	151305	15.1305	Electrical/Electronics Drafting and Electrical/Electronics CAD/CADD.	
0953.40	Mechanical Drafting	151306	15.1306	Mechanical Drafting and Mechanical Drafting CAD/CADD.	
0953.60	Technical Illustration	500410	50.0410	Illustration.	
0954.00	Chemical Technology	410301	41.0301	Chemical Technology/Technician.	
0954.20	Plastics and Composites	150607	15.0607	Plastics and Polymer Engineering Technology/Technician.	
0954.20	Plastics and Composites	150617	15.0617	Composite Materials Technology/Technician.	New 2020 CIP code
0954.30	Petroleum Technology	150903	15.0903	Petroleum Technology/Technician.	
0955.00	Laboratory Science Technology	410101	41.0101	Biology/Biotechnology Technology/Technician.	New Title
0955.00	Laboratory Science Technology	410301	41.0301	Chemical Technology/Technician.	

0956.00	Manufacturing and Industrial Technology	150405	15.0405 Robotics Technology/Technician.	
0956.00	Manufacturing and Industrial Technology	150407	15.0407 Mechatronics, Robotics and Automation Engineering Technology/Technician.	New 2020 CIP code
0956.00	Manufacturing and Industrial Technology	150611	15.0611 Metallurgical Technology/Technician.	
0956.00	Manufacturing and Industrial Technology	150613	15.0613 Manufacturing Engineering Technology/Technician.	
0956.00	Manufacturing and Industrial Technology	150803	15.0803 Automotive Engineering Technology/Technician.	
0956.00	Manufacturing and Industrial Technology	150805	15.0805 Mechanical/Mechanical Engineering Technology/Technician.	New Title
0956.00	Manufacturing and Industrial Technology	151307	15.1307 3-D Modeling and Design Technology/Technician.	New 2020 CIP code
0956.00	Manufacturing and Industrial Technology	500404	50.0404 Industrial and Product Design.	
0956.30	Machining and Machine Tools	480501	48.0501 Machine Tool Technology/Machinist.	
0956.40	Sheet Metal and Structural Metal	480506	48.0506 Sheet Metal Technology/Sheetworking.	
0956.50	Welding Technology	150614	15.0614 Welding Engineering Technology/Technician.	
0956.50	Welding Technology	480508	48.0508 Welding Technology/Welder.	
0956.70	Industrial and Occupational Safety and Health	150703	15.0703 Industrial Safety Technology/Technician.	New Title
0956.70	Industrial and Occupational Safety and Health	150705	15.0705 Process Safety Technology/Technician.	New 2020 CIP code
0956.80	Industrial Quality Control	150702	15.0702 Quality Control Technology/Technician.	
0957.00	Civil and Construction Management Technology	460412	46.0412 Building/Construction Site Management/Manager.	
0957.00	Civil and Construction Management Technology	460415	46.0415 Building Construction Technology/Technician.	New Title
0957.00	Civil and Construction Management Technology	460499	46.0499 Building/Construction Finishing, Management and Inspection, Other.	
0957.00	Civil and Construction Management Technology	522001	52.2001 Construction Management, General.	New Title
0957.00	Civil and Construction Management Technology	522002	52.2002 Construction Project Management.	New 2020 CIP code
0957.20	Construction Inspection	460403	46.0403 Building/Home/Construction Inspection/Inspector.	
0957.30	Surveying	151102	15.1102 Surveying Technology/Surveying.	
0958.00	Water and Wastewater Technology	150506	15.0506 Water Quality and Wastewater Treatment Management and Recycling Technology/Technician.	
0959.00	Marine Technology	150806	15.0806 Marine Engineering Technology/Technician.	New 2020 CIP code
0959.00	Marine Technology	470616	47.0616 Marine Maintenance/Fitter and Ship Repair Technology/Technician.	
0959.00	Marine Technology	490399	49.0399 Marine Transportation, Other.	
0959.10	Diving and Underwater Safety	490304	49.0304 Diver, Professional and Instructor.	
0961.00	Optics	511006	51.1006 Ophthalmic Laboratory Technology/Technician.	
0962.00	Musical Instrument Repair	470404	47.0404 Musical Instrument Fabrication and Repair.	
0999.00	Other Engineering and Related Industrial Technologies	150699	15.0699 Industrial Production Technologies/Technicians, Other.	New Title
0999.00	Other Engineering and Related Industrial Technologies	159999	15.9999 Engineering/Engineering-Related Technologies/Technicians, Other.	New Title
1001.00	Fine Arts, General	500101	50.0101 Visual and Performing Arts, General.	
1002.00	Art	500701	50.0701 Art/Art Studies, General.	
1002.00	Art	500702	50.0702 Fine/Studio Arts, General.	

1002.00	Art	500703	50.0703 Art History, Criticism and Conservation.	
1002.10	Painting and Drawing	500705	50.0705 Drawing.	
1002.20	Sculpture	500709	50.0709 Sculpture.	
1002.30	Ceramics	500711	50.0711 Ceramic Arts and Ceramics.	
1004.00	Music	500509	50.0509 Musical Theatre	
1004.00	Music	500901	50.0901 Music, General.	
1005.00	Commercial Music	100203	10.0203 Recording Arts Technology/Technician.	New Title
1005.00	Commercial Music	150307	15.0307 Audio Engineering Technology/Technician.	New 2020 CIP code
1005.00	Commercial Music	500904	50.0903 Music Performance, General.	
1005.00	Commercial Music	500913	50.0913 Music Technology.	
1005.00	Commercial Music	500917	50.0917 Sound Arts.	New 2020 CIP code
1005.00	Commercial Music	501003	50.1003 Music Management.	
1006.00	Technical Theater	500502	50.0502 Technical Theatre/Theatre Design and Technology.	
1006.00	Technical Theater	500502	50.0512 Theatre and Dance.	New 2020 CIP code
1006.00	Technical Theater	500507	50.0507 Directing and Theatrical Production.	
1007.00	Dramatic Arts	500501	50.0501 Drama and Dramatics/Theatre Arts, General.	
1007.00	Dramatic Arts	500502	50.0512 Theatre and Dance.	New 2020 CIP code
1007.00	Dramatic Arts	501101	50.1101 Community/Environmental/Socially-Engaged Art.	New 2020 CIP code
1008.00	Dance	500301	50.0301 Dance, General.	
1008.10	Commercial Dance	500399	50.0399 Dance, Other.	
1009.00	Applied Design	500401	50.0401 Design and Visual Communications, General.	
1009.10	Jewelry	500713	50.0713 Jewelry Arts.	New Title
1011.00	Cinematography	500605	50.0605 Photography.	
1012.00	Applied Photography	100201	10.0201 Photographic and Film/Video Technology/Technician.	New Title
1012.00	Applied Photography	500406	50.0406 Commercial Photography.	
1013.00	Commercial Art	500402	50.0402 Commercial and Advertising Art.	
1030.00	Graphic Art and Design	500409	50.0409 Graphic Design.	
1099.00	Other Fine and Applied Arts	301401	30.1401 Museology/Museum Studies.	
1099.00	Other Fine and Applied Arts	501101	50.1101 Community/Environmental/Socially-Engaged Art.	New 2020 CIP code
1099.00	Other Fine and Applied Arts	509999	50.9999 Visual and Performing Arts, Other.	
1101.00	Foreign Language	160101	16.0101 Foreign Languages and Literatures, General.	
1101.00	Foreign Language	304501	30.4501 History and Language/Literature.	New 2020 CIP code
1102.00	French	160901	16.0901 French Language and Literature.	
1103.00	German	160501	16.0501 German Language and Literature.	

1104.00	Italian	160902	16.0902 Italian Language and Literature.	
1105.00	Spanish	160905	16.0905 Spanish Language and Literature.	
1106.00	Russian	160402	16.0402 Russian Language and Literature.	
1107.00	Chinese	160301	16.0301 Chinese Language and Literature.	
1108.00	Japanese	160302	16.0302 Japanese Language and Literature.	
1109.00	Latin	161203	16.1203 Latin Language and Literature.	
1110.00	Greek	160601	16.0601 Modern Greek Language and Literature.	
1111.00	Hebrew	161102	16.1102 Hebrew Language and Literature.	
1112.00	Arabic	161101	16.1101 Arabic Language and Literature.	
1116.00	African Languages (Non-Semitic)	160201	16.0201 African Languages, Literatures and Linguistics.	
1117.00	Asian, South Asian and Pacific Islands (Chinese and Japanese)	160399	16.0399 East Asian Languages, Literatures and Linguistics, Other.	
1117.10	Filipino (Tagalog)	161404	16.1404 Filipino/Tagalog Language and Literature.	
1117.20	Vietnamese	161408	16.1408 Vietnamese Language and Literature.	
1117.30	Korean	160303	16.0303 Korean Language and Literature.	
1119.00	Portuguese	160904	16.0904 Portuguese Language and Literature.	
1199.00	Other Foreign Languages	169999	16.9999 Foreign Languages, Literatures and Linguistics, Other.	
1201.00	Health Occupations, General	510000	51.0000 Health Services/Allied Health/Health Sciences, General.	
1201.00	Health Occupations, General	510001	51.0001 Health and Wellness, General.	
1202.00	Hospital and Health Care Administration	510701	51.0701 Health/Health Care Administration/Management.	
1202.00	Hospital and Health Care Administration	510702	51.0702 Hospital and Health Care Facilities Administration/Management.	
1202.00	Hospital and Health Care Administration	510708	51.0708 Medical Transcription/Transcriptionist.	
1202.00	Hospital and Health Care Administration	513202	51.3202 Health Professions Education.	New 2020 CIP code
1205.00	Medical Laboratory Technology	511004	51.1004 Clinical/Medical Laboratory Technician.	
1205.10	Phlebotomy	511009	51.1009 Phlebotomy Technician/Phlebotomist.	
1206.00	Physicians Assistant	510912	51.0912 Physician Assistant.	
1206.00	Physicians Assistant	511111	51.1111 Pre-Physician Assistant.	New 2020 CIP code
1208.00	Medical Assisting	510710	51.0710 Medical Office Assistant/Specialist.	
1208.00	Medical Assisting	510714	51.0714 Medical Insurance Specialist/Medical Biller.	
1208.00	Medical Assisting	510801	51.0801 Medical/Clinical Assistant.	
1208.10	Clinical Medical Assisting	510801	51.0801 Medical/Clinical Assistant.	
1208.20	Administrative Medical Assisting	510710	51.0710 Medical Office Assistant/Specialist.	
1208.20	Administrative Medical Assisting	510712	51.0712 Medical Reception/Receptionist.	
1208.20	Administrative Medical Assisting	510714	51.0714 Medical Insurance Specialist/Medical Biller.	
1208.20	Administrative Medical Assisting	510716	51.0716 Medical Administrative/Executive Assistant and Medical Secretary.	

1208.30	Health Facility Unit Coordinator	510703	51.0703 Health Unit Coordinator/Ward Clerk.	
1208.30	Health Facility Unit Coordinator	510704	51.0704 Health Unit Manager/Ward Supervisor.	
1208.30	Health Facility Unit Coordinator	510711	51.0711 Medical/Health Management and Clinical Assistant/Specialist.	
1209.00	Hospital Central Service Technician	510799	51.0799 Health and Medical Administrative Services, Other.	
1210.00	Respiratory Care/Therapy	510812	51.0812 Respiratory Therapy Technician/Assistant.	
1210.00	Respiratory Care/Therapy	510908	51.0908 Respiratory Care Therapy/Therapist.	
1211.00	Pharmacy Technician	510917	51.0917 Polysomnography.	
1212.00	Electro-Neurodiagnostic Technology	510903	51.0903 Electroneurodiagnostic/Electroencephalographic Technology/Technologist.	
1213.00	Cardiovascular Technician	510901	51.0901 Cardiovascular Technology/Technologist.	
1214.00	Orthopedic Assistant	510806	51.0806 Physical Therapy Assistant.	New Title
1214.00	Orthopedic Assistant	511099	51.1099 Clinical/Medical Laboratory Science and Allied Professions, Other.	
1215.00	Electrocardiography	510902	51.0902 Electrocardiograph Technology/Technician.	
1217.00	Surgical Technician	510909	51.0909 Surgical Technology/Technologist.	
1218.00	Occupational Therapy Technology	510803	51.0803 Occupational Therapist Assistant.	
1219.00	Optical Technology	511802	51.1802 Optometric Technician/Assistant.	
1220.00	Speech/Language Pathology and Audiology	510204	51.0204 Audiology/Audiologist and Speech-Language Pathology/Pathologist.	
1220.00	Speech/Language Pathology and Audiology	510204	51.0816 Speech-Language Pathology Assistant.	
1221.00	Pharmacy Technology	510805	51.0805 Pharmacy Technician/Assistant.	
1222.00	Physical Therapist Assistant	510806	51.0806 Physical Therapy Assistant.	New Title
1222.00	Physical Therapist Assistant	512605	51.2605 Physical Therapy Technician/Aide.	New 2020 CIP code
1223.00	Health Information Technology	510707	51.0707 Health Information/Medical Records Technology/Technician.	
1223.00	Health Information Technology	510709	51.0709 Medical Office Computer Specialist/Assistant.	
1223.10	Health Information Coding	510713	51.0713 Medical Insurance Coding Specialist/Coder.	
1223.10	Health Information Coding	510714	51.0714 Medical Insurance Specialist/Medical Biller.	
1224.00	School Health Clerk	512299	51.2299 Public Health, Other.	
1224.00	School Health Clerk	513902	51.3902 Nursing Assistant/Aide and Patient Care Assistant/Aide.	
1225.00	Radiologic Technology	510907	51.0907 Medical Radiologic Technology/Science - Radiation Therapist.	
1225.00	Radiologic Technology	510911	51.0911 Radiologic Technology/Science - Radiographer.	
1226.00	Radiation Therapy Technician	510907	51.0907 Medical Radiologic Technology/Science - Radiation Therapist.	
1227.00	Diagnostic Medical Sonography	510910	51.0910 Diagnostic Medical Sonography/Sonographer and Ultrasound Technician.	
1227.00	Diagnostic Medical Sonography	510920	51.0920 Magnetic Resonance Imaging (MRI) Technology/Technician.	
1228.00	Athletic Training and Sports Medicine	422815	42.2815 Performance and Sport Psychology.	New 2020 CIP code
1228.00	Athletic Training and Sports Medicine	510913	51.0913 Athletic Training/Trainer.	
1230.00	Nursing	513801	51.3801 Registered Nursing/Registered Nurse.	

1230.00	Nursing	513901	51.3901 Licensed Practical/Vocational Nurse Training.	
1230.00	Nursing	513902	51.3902 Nursing Assistant/Aide and Patient Care Assistant/Aide.	
1230.10	Registered Nursing	513801	51.3801 Registered Nursing/Registered Nurse.	
1230.20	Licensed Vocational Nursing	513901	51.3901 Licensed Practical/Vocational Nurse Training.	
1230.30	Certified Nurse Assistant	513902	51.3902 Nursing Assistant/Aide and Patient Care Assistant/Aide.	
1230.80	Home Health Aide	512601	51.2601 Health Aide.	
1230.80	Home Health Aide	512602	51.2602 Home Health Aide/Home Attendant.	
1239.00	Psychiatric Technician	511502	51.1502 Psychiatric/Mental Health Services Technician.	
1240.00	Dental Occupations	510601	51.0601 Dental Assisting/Assistant.	
1240.00	Dental Occupations	510602	51.0602 Dental Hygiene/Hygienist.	
1240.00	Dental Occupations	510699	51.0699 Dental Services and Allied Professions, Other.	
1240.10	Dental Assistant	510601	51.0601 Dental Assisting/Assistant.	
1240.20	Dental Hygienist	510602	51.0602 Dental Hygiene/Hygienist.	
1240.30	Dental Laboratory Technician	510603	51.0603 Dental Laboratory Technology/Technician.	
1250.00	Emergency Medical Services	510904	51.0904 Emergency Medical Technology/Technician (EMT Paramedic).	
1251.00	Paramedic	510904	51.0904 Emergency Medical Technology/Technician (EMT Paramedic).	
1255.00	Mortuary Science	120301	12.0301 Funeral Service and Mortuary Science, General.	
1260.00	Health Professions, Transfer Core Curriculum	510000	51.0000 Health Services/Allied Health/Health Sciences, General.	
1261.00	Community Health Care Worker	512208	51.2208 Community Health and Preventive Medicine.	
1262.00	Massage Therapy	513501	51.3501 Massage Therapy/Therapeutic Massage.	
1262.00	Massage Therapy	513502	51.3502 Asian Bodywork Therapy.	
1270.00	Kinesiology	260908	26.0908 Exercise Physiology and Kinesiology.	Added
1270.00	Kinesiology	310505	31.0505 Exercise Science and Kinesiology.	New Title
1270.00	Kinesiology	422815	42.2815 Performance and Sport Psychology.	New 2020 CIP code
1299.00	Other Health Occupations	510899	51.0899 Allied Health and Medical Assisting Services, Other.	
1299.00	Other Health Occupations	510999	51.0999 Allied Health Diagnostic, Intervention and Treatment Professions, Other.	
1299.00	Other Health Occupations	510999	51.0999 Allied Health Diagnostic, Intervention and Treatment Professions, Other.	
1299.00	Other Health Occupations	519999	51.9999 Health Professions and Related Clinical Sciences, Other.	
1301.00	Family and Consumer Sciences, General	190101	19.0101 Family and Consumer Sciences/Human Sciences, General.	
1301.10	Consumer Services	190201	19.0201 Business Family and Consumer Sciences/Human Sciences.	
1301.10	Consumer Services	190403	19.0403 Consumer Services and Advocacy.	
1302.00	Interior Design and Merchandising	500408	50.0408 Interior Design.	
1303.00	Fashion	190901	19.0901 Apparel and Textiles, General.	
1303.00	Fashion	190906	19.0906 Fashion and Fabric Consultant.	

1303.00	Fashion	500510	50.0510 Costume Design.	
1303.10	Fashion Design	190906	19.0906 Fashion and Fabric Consultant.	
1303.10	Fashion Design	500407	50.0407 Fashion/Apparel Design.	
1303.10	Fashion Design	500510	50.0510 Costume Design.	
1303.20	Fashion Merchandising	190905	19.0905 Apparel and Textile Marketing Management.	
1303.20	Fashion Merchandising	190906	19.0906 Fashion and Fabric Consultant.	
1303.20	Fashion Merchandising	521902	52.1902 Fashion Merchandising.	
1303.20	Fashion Merchandising	521904	52.1904 Apparel and Accessories Marketing Operations.	
1303.30	Fashion Production	190902	19.0902 Apparel and Textile Manufacture.	
1305.00	Child Development/Early Care and Education	131210	13.1210 Early Childhood Education and Teaching.	
1305.00	Child Development/Early Care and Education	190706	19.0706 Child Development.	
1305.00	Child Development/Early Care and Education	190709	19.0709 Child Care Provider/Assistant.	
1305.00	Child Development/Early Care and Education	190711	19.0711 Early Childhood and Family Studies.	New 2020 CIP code
1305.10	Child and Adolescent Development	190706	19.0706 Child Development.	
1305.00	Child Development/Early Care and Education	512317	51.2317 Play Therapy/Therapist.	New 2020 CIP code
1305.20	Children with Special Needs	131001	13.1001 Special Education and Teaching, General.	New Title
1305.20	Children with Special Needs	131013	13.1013 Education/Teaching of Individuals with Autism.	
1305.20	Children with Special Needs	131015	13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs.	
1305.20	Children with Special Needs	131099	13.1099 Special Education and Teaching, Other.	
1305.20	Children with Special Needs	511510	51.1510 Infant/Toddler Mental Health Services.	New 2020 CIP code
1305.40	Preshool Age Children	131210	13.1210 Early Childhood Education and Teaching.	
1305.40	Preshool Age Children	190709	19.0709 Child Care Provider/Assistant.	
1305.50	The School Age Child	131210	13.1210 Early Childhood Education and Teaching.	
1305.50	The School Age Child	190709	19.0709 Child Care Provider/Assistant.	
1305.60	Parenting and Family Education	190707	19.0707 Family and Community Services.	
1305.60	Parenting and Family Education	190712	19.0712 Parent Education Services.	New 2020 CIP code
1305.70	Foster and Kinship Care	190707	19.0707 Family and Community Services.	
1305.80	Child Development Administration and Management	130401	13.0401 Educational Leadership and Administration, General.	
1305.80	Child Development Administration and Management	130414	13.0414 Early Childhood Program Administration.	New 2020 CIP code
1305.80	Child Development Administration and Management	190708	19.0708 Child Care and Support Services Management.	
1305.90	Infants and Toddlers	131210	13.1210 Early Childhood Education and Teaching.	
1305.90	Infants and Toddlers	190706	19.0706 Child Development.	
1305.90	Infants and Toddlers	190709	19.0709 Child Care Provider/Assistant.	
1306.00	Nutrition, Foods and Culinary Arts	120500	12.0500 Cooking and Related Culinary Arts, General.	

1306.00	Nutrition, Foods and Culinary Arts	120599	12.0599 Culinary Arts and Related Services, Other.	
1306.00	Nutrition, Foods and Culinary Arts	190501	19.0501 Foods, Nutrition and Wellness Studies, General.	
1306.00	Nutrition, Foods and Culinary Arts	190504	19.0504 Human Nutrition.	
1306.20	Dietetic Services and Management	190505	19.0505 Foodservice Systems Administration/Management.	
1306.20	Dietetic Services and Management	513103	51.3103 Dietetic Technician.	
1306.20	Dietetic Services and Management	513104	51.3104 Dietitian Assistant.	
1306.30	Culinary Arts	120500	12.0500 Cooking and Related Culinary Arts, General.	
1306.30	Culinary Arts	120501	12.0501 Baking and Pastry Arts/Baker/Pastry Chef.	
1306.30	Culinary Arts	120503	12.0503 Culinary Arts/Chef Training.	
1306.30	Culinary Arts	120505	12.0505 Food Preparation/Professional Cooking/Kitchen Assistant.	
1306.60	Dietetic Technology	513103	51.3103 Dietetic Technician.	
1306.60	Dietetic Technology	513104	51.3104 Dietitian Assistant.	
1307.00	Hospitality	520901	52.0901 Hospitality Administration/Management, General.	
1307.00	Hospitality	520907	52.0907 Meeting and Event Planning.	
1307.00	Hospitality	520909	52.0909 Hotel, Motel and Restaurant Management.	
1307.10	Restaurant and Food Services and Management	120504	12.0504 Restaurant, Culinary and Catering Management/Manager.	
1307.10	Restaurant and Food Services and Management	120507	12.0507 Food Service, Waiter/Waitress and Dining Room Management/Manager.	
1307.10	Restaurant and Food Services and Management	190505	19.0505 Foodservice Systems Administration/Management.	
1307.10	Restaurant and Food Services and Management	520905	52.0905 Restaurant/Food Services Management.	
1307.10	Restaurant and Food Services and Management	520910	52.0910 Brewery/Brewpub Operations/Management.	New 2020 CIP code
1307.20	Lodging Management	520904	52.0904 Hotel/Motel Administration/Management.	
1307.30	Resort and Club Management	120601	12.0601 Casino Operations and Services, General.	New 2020 CIP code
1307.30	Resort and Club Management	520906	52.0906 Resort Management.	
1307.30	Resort and Club Management	520908	52.0908 Casino Management.	New Title
1308.00	Family Studies	190101	19.0101 Family and Consumer Sciences/Human Sciences, General.	
1308.00	Family Studies	190401	19.0401 Family Resource Management Studies, General.	
1308.00	Family Studies	190701	19.0701 Human Development and Family Studies, General.	
1309.00	Gerontology	190499	19.0499 Family and Consumer Economics and Related Services, Other.	
1309.00	Gerontology	190702	19.0702 Adult Development and Aging.	
1309.00	Gerontology	301101	30.1101 Gerontology.	
1399.00	Other Family and Consumer Sciences	199999	19.9999 Family and Consumer Sciences/Human Sciences, Other.	
1401.00	Law, General	220000	22.0000 Legal Studies.	New Title
1402.00	Paralegal	220302	22.0302 Legal Assistant/Paralegal.	
1499.00	Other Law	220399	22.0399 Legal Support Services, Other.	

1499.00	Other Law	229999	22.9999 Legal Professions and Studies, Other.	
1501.00	English	230101	23.0101 English Language and Literature, General.	
1501.10	Linguistics	160102	16.0102 Linguistics.	
1502.00	Language Arts	239999	23.9999 English Language and Literature/Letters, Other.	
1503.00	Comparative Literature	160104	16.0104 Comparative Literature.	
1504.00	Classics	161200	16.1200 Classics and Classical Languages, Literatures and Linguistics, General.	
1506.00	Speech Communication	090101	09.0101 Speech Communication and Rhetoric.	
1507.00	Creative Writing	231302	23.1302 Creative Writing.	
1509.00	Philosophy	380101	38.0101 Philosophy.	
1510.00	Religious Studies	380201	38.0201 Religion/Religious Studies.	
1520.00	Reading	230101	23.0101 English Language and Literature, General.	
1599.00	Other Humanities	240199	24.0199 Liberal Arts and Sciences, General Studies and Humanities, Other.	
1601.00	Library Science, General	250101	25.0101 Library and Information Science.	
1602.00	Library Technician (Aide)	250301	25.0301 Library and Archives Assisting.	
1699.00	Other Library Science	259999	25.9999 Library Science, Other.	
1701.00	Mathematics, General	270101	27.0101 Mathematics, General.	
1702.00	Mathematics Skills	270301	27.0301 Applied Mathematics, General.	New Title
1799.00	Other Mathematics	270199	27.0199 Mathematics, Other.	
1799.00	Other Mathematics	279999	27.9999 Mathematics and Statistics, Other.	
1801.00	Military Science	280599	28.0599 Military Science and Operational Studies, Other.	
1899.00	Other Military Studies	289999	28.9999 Military Science, Leadership and Operational Art, Other.	
1899.00	Other Military Studies	290399	29.0399 Military Applied Sciences, Other.	
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1905.00	Chemistry, General	400501	40.0501 Chemistry, General.	
1911.00	Astronomy	400201	40.0201 Astronomy.	
1914.00	Geology	400601	40.0601 Geology/Earth Science, General.	
1919.00	Oceangraphy	400607	40.0607 Oceanography, Chemical and Physical.	
1920.00	Ocean Technology	303201	30.3201 Marine Sciences.	
1920.00	Ocean Technology	419999	41.9999 Science Technologies/Technicians, Other.	
1930.00	Earth Science	303801	30.3801 Earth Systems Science.	New 2020 CIP code
1930.00	Earth Science	400601	40.0601 Geology/Earth Science, General.	
1999.00	Other Physical Sciences	409999	40.9999 Physical Sciences, Other.	
2001.00	Psychology, General	420101	42.0101 Psychology, General.	

2001.00	Psychology, General	422710	42.2710	Developmental and Adolescent Psychology.	New 2020 CIP code
2001.00	Psychology, General	422815	42.2815	Performance and Sport Psychology.	New 2020 CIP code
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2099.00	Other Psychology	429999	42.9999	Psychology, Other.	
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2102.00	Public Administration	440402	44.0402	Public Works Management.	New 2020 CIP code
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2102.10	Public Works	490207	49.0207	Flagging and Traffic Control.	
2104.00	Human Services	440701	44.0000	Public Administration And Social Service Professions.	
2104.00	Human Services	440701	44.0701	Social Work.	
2104.00	Human Services	511513	51.1513	Trauma Counseling.	New 2020 CIP code
2104.00	Human Services	512300	51.2300	Rehabilitation and Therapeutic Professions, General.	New 2020 CIP code
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2104.50	Disability Services	440701	44.0701	Social Work.	
2104.50	Disability Services	512300	51.2300	Rehabilitation and Therapeutic Professions, General.	New 2020 CIP code
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2105.00	Administration of Justice	430103	43.0103	Criminal Justice/Law Enforcement Administration.	
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2133.00	Fire Technology	430205	43.0205 Fire/Arson Investigation and Prevention.	
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2201.30	Social Justice: General	050299	05.0299 Ethnic, Cultural Minority, and Gender Studies, Other	
2201.40	Social Justice: LGBTQ Studies	050208	05.0208 Gay/Lesbian Studies	
2201.50	Social Justice: Ethnic Studies	050200	05.0200 Ethnic Studies	
2201.60	Social Justice Chicano Studies	050203	05.0203 Hispanic-American, Puerto Rican, and Mexican-American/Chicano Studies	
2201.70	Social Justice: Gender Studies	050207	05.0207 Women Studies	
2201.80	Social Justice: African American Studies	050201	05.0201 African American/Black Studies	
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2202.00	Anthropology	450201	45.0201 Anthropology, General.	New Title
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2204.00	Economics	450601	45.0601 Economics, General.	
2205.00	History	304501	30.4501 History and Language/Literature.	New 2020 CIP code
2205.00	History	540101	54.0101 History, General.	
2206.00	Geography	304101	30.4101 Environmental Geosciences.	New 2020 CIP code
2206.00	Geography	304401	30.4401 Geography and Environmental Studies.	New 2020 CIP code

2206.00	Geography	450701	45.0701 Geography.	
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2206.10	Geographic Information Systems	450702	45.0702 Geographic Information Science and Cartography.	
2207.00	Political Science	451001	45.1001 Political Science and Government, General.	
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2208.00	Sociology	050208	05.0208 Gay/Lesbian Studies.	
2208.00	Sociology	451101	45.1101 Sociology, General.	New Title
2208.00	Sociology	451102	45.1102 Applied/Public Sociology.	New 2020 CIP code
2208.00	Sociology	501101	50.1101 Community/Environmental/Socially-Engaged Art.	New 2020 CIP code
2210.00	International Studies	450901	45.0901 International Relations and Affairs.	
2210.10	Area Studies	050199	05.0199 Area Studies, Other.	
2299.00	Other Social Sciences	459999	45.9999 Social Sciences, Other.	
3007.00	Cosmetology and Barbering	120401	12.0401 Cosmetology/Cosmetologist, General.	
3007.00	Cosmetology and Barbering	120402	12.0402 Barbering/Barber.	
3007.00	Cosmetology and Barbering	120406	12.0406 Make-Up Artist/Specialist.	
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3007.00	Cosmetology and Barbering	120499	12.0499 Cosmetology and Related Personal Grooming Arts, Other.	
3008.00	Dry Cleaning	190999	19.0999 Apparel and Textiles, Other.	
3009.00	Travel Services and Tourism	520903	52.0903 Tourism and Travel Services Management.	
3009.00	Travel Services and Tourism	521905	52.1905 Tourism and Travel Services Marketing Operations.	
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3020.00	Aviation and Airport Management and Services	490104	49.0104 Aviation/Airway Management and Operations.	
3020.10	Aviation and Airport Management	490104	49.0104 Aviation/Airway Management and Operations.	
3020.20	Piloting	490102	49.0102 Airline/Commercial/Professional Pilot and Flight Crew.	
3020.30	Air Traffic Control	490105	49.0105 Air Traffic Controller.	
3020.40	Flight Attendant	490106	49.0106 Airline Flight Attendant.	
3099.00	Other Commercial Services	129999	12.9999 Culinary, Entertainment and Personal Services, Other.	New Title
4901.00	Liberal Arts and Sciences, General	240101	24.0101 Liberal Arts and Sciences/Liberal Studies.	

4901.00	Liberal Arts and Sciences, General	304501	30.4501 History and Language/Literature.	New 2020 CIP code
4901.10	Transfer Studies	240101	24.0101 Liberal Arts and Sciences/Liberal Studies.	
4901.20	Liberal Studies	240101	24.0101 Liberal Arts and Sciences/Liberal Studies.	
4902.00	Biological and Physical Sciences (and Mathematics)	300101	30.0101 Biological and Physical Sciences.	
4903.00	Humanities	240103	24.0103 Humanities/Humanistic Studies.	
4903.00	Humanities	305202	30.5202 Digital Humanities.	New 2020 CIP code
4903.10	Humanities and Fine Arts	240103	24.0103 Humanities/Humanistic Studies.	
4903.30	Humanities and Social Sciences	240103	24.0103 Humanities/Humanistic Studies.	
4930.00	General Studies	240102	24.0102 General Studies.	
4930.09	Supervised Tutoring	320108	32.0108 Developmental/Remedial English.	
4930.10	Career Guidance and Orientation	320105	32.0105 Job-Seeking/Changing Skills.	
4930.10	Career Guidance and Orientation	320107	32.0107 Career Exploration/Awareness Skills.	
4930.11	Interpersonal Skills	350101	35.0101 Interpersonal and Social Skills, General.	
4930.12	Job Seeking/Changing Skills	300001	30.0001 Comprehensive Transition and Postsecondary (CTP) Program.	New 2020 CIP code
4930.12	Job Seeking/Changing Skills	320105	32.0105 Job-Seeking/Changing Skills.	
4930.13	Academic Guidance	320105	32.0105 Job-Seeking/Changing Skills.	
4930.14	Study Skills	320199	32.0199 Basic Skills and Developmental/Remedial Education, Other.	
4930.30	Learning Skills, Handicapped	320199	32.0199 Basic Skills and Developmental/Remedial Education, Other.	
4930.31	Living Skills, Handicapped	300001	30.0001 Comprehensive Transition and Postsecondary (CTP) Program.	New 2020 CIP code
4930.31	Living Skills, Handicapped	320199	32.0199 Basic Skills and Developmental/Remedial Education, Other.	
4930.32	Learning Skills, Learning Disabled	320199	32.0199 Basic Skills and Developmental/Remedial Education, Other.	
4930.33	Learning Skills, Speech Impaired	320199	32.0199 Basic Skills and Developmental/Remedial Education, Other.	
4930.60	Elementary Education (Grades 1-8)	320101	32.0101 Basic Skills and Developmental/Remedial Education, General.	
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4930.72	Leadership Skills Development	320105	32.0105 Job-Seeking/Changing Skills.	
4930.84	English as a Second Language - Writing	320108	32.0108 Developmental/Remedial English.	
4930.84	English as a Second Language - Writing	320109	32.0109 Second Language Learning.	
4930.85	English as a Second Language - Reading	320108	32.0108 Developmental/Remedial English.	
4930.85	English as a Second Language - Reading	320109	32.0109 Second Language Learning.	
4930.86	English as a Second Language - Speaking/Listening	320108	32.0108 Developmental/Remedial English.	
4930.86	English as a Second Language - Speaking/Listening	320109	32.0109 Second Language Learning.	
4930.87	English as a Second Language - Integrated	320108	32.0108 Developmental/Remedial English.	
4930.87	English as a Second Language - Integrated	320109	32.0109 Second Language Learning.	
4930.90	Citizenship	330102	33.0102 American Citizenship Education.	

4931.00	Vocational ESL	161701	16.1701 English as a Second Language.	New 2020 CIP code
4931.00	Vocational ESL	320108	32.0108 Developmental/Remedial English.	
4931.00	Vocational ESL	320109	32.0109 Second Language Learning.	
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4932.00	General Work Experience	320111	32.0111 Workforce Development and Training.	
4999.00	Other Interdisciplinary Studies	309999	30.9999 Multi-/Interdisciplinary Studies, Other.	

Verbs Demonstrating Cognitive Activity

Bloom's Taxonomy

Verbs Demonstrating Cognitive Activity

			Critical Thinking		
Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation
know	restate	apply	analyze	compose	judge
identify	locate	relate	compare	produce	assess
relate	report	develop	probe	design	compare
list	recognize	translate	inquire	assemble	evaluate
define	explain	use	examine	create	conclude
recall	express	operate	contrast	prepare	measure
memorize	identify	organize	categorize	predict	deduce
repeat	discuss	employ	differentiate	modify	argue
record	describe	restructure	contrast	tell	decide
name	discuss	interpret	investigate	plan	choose
recognize	review	demonstrate	detect	invent	rate
acquire	infer	illustrate	survey	formulate	select
	illustrate	practice	classify	collect	estimate
	interpret	calculate	deduce	set up	validate
	draw	show	experiment	generalize	consider
	represent	exhibit	scrutinize	document	appraise
	differentiate	dramatize	discover	combine	value
	conclude		inspect	relate	criticize
			dissect	propose	infer
			discriminate	develop	
			separate	arrange	
				construct	
				organize	
				originate	
				derive	
				write	
				propose	

Many existing course outlines have objectives which do not reflect the "active verbs" conveying critical thinking. It is usually the case that the course itself is taught in a way that incorporates critical thinking, but the course outline itself does not reflect those objectives and methodologies. Bringing the objectives into line is primarily a matter of reflecting upon those objectives which require analysis, synthesis, and evaluation. Some "before and after" examples are shown below.

FIRST EXAMPLE:

BEFORE: Know the significant art achievements of Renaissance through Modern Europe.

AFTER: Compare and contrast the art works in the same historical period with art works from other historical periods to ascertain their stylistic aesthetic and historical relationships.

7th Edition

Program and Course Approval Handbook

California Community Colleges Chancellor's Office | Eloy Ortiz Oakley, Chancellor

2019 PROGRAM AND COURSE APPROVAL HANDBOOK

The Program and Course Approval Handbook (PCAH) is dedicated to the legacy of Randal "Randy" L. Lawson, beloved colleague, friend, mentor, and champion of students.

One of Randal "Randy" Lawson's most significant and lasting accomplishments was his partnership with the Academic Senate for California Community Colleges (ASCCC) and, in 2005, his determination to establish the System Advisory Curriculum Committee (SACC), later renamed the California Community College Curriculum Committee (5C). He worked tirelessly with the ASCCC and the Chancellor's Office to create a framework for curriculum issues to be discussed, vetted, and reviewed at a system-wide scale with recommendations to the Chancellor's Office and to the Board of Governors for final approval. His leadership as CIO co-chair of SACC continued to his death in 2014. Because of his leadership and dedication to this effort, this committee effectively continues its work today.

Randal "Randy" Lawson worked at Santa Monica College for 35 years and was the Executive Vice President and Chief Instructional Officer when he passed away. Randy was an advisor, a mentor, and a tireless advocate for student success. He had the upmost respect and admiration of those who met and knew him. Randy was known for his sense of humor, love of music, and a dedication to education that won him statewide recognition. Randy was often described as a quiet, yet strong, leader. Those who knew him and worked closely with Randy valued his integrity, passion for students, and his transformational leadership.

The PCAH is dedicated to the legacy left by Randy, including the collaborative efforts and system-wide impact of 5C, and to all current, past, and future members of 5C. May their work continue to be defined by the integrity, dedication, transformational leadership, and commitment to students and to student success modeled by Randy.

Table of Contents

PART I:
OVERVIEW OF CURRICULUM AUTHORITY AND APPROVAL

SECTION 1: AN OVERVIEW OF PROGRAM AND COURSE APPROVAL

This section provides an overview of program and course approval and identifies portions of the Program and Course Approval handbook (PCAH) relevant to credit and noncredit curriculum.

- Credit Curriculum

- Noncredit Curriculum

Overview

This Program and Course Approval Handbook (PCAH) assists California community college administrators, faculty, and classified professionals in the development of programs and courses and the submission of these proposals for review and chaptering by the Chancellor's Office.

By law, the Chancellor is required to prepare and distribute a handbook for program and course approval (California Code Regulations, Title 5, § 55000.5). The Chancellor has delegated these responsibilities to the Educational Services and Support Division of the California Community Colleges Chancellor's Office (Chancellor's Office). The PCAH was developed to provide the California community college system with general guidelines and instructions for the submission of curriculum for approval, chaptering and maintenance. Since the first publication, updates have been published May 1985, July 1987, 1992, March 1995, September 2001, March 2003, March 2009, September 2012, July 2017, and November 2019 to improve and incorporate new information, clarify previous language, and inform and provide guidance on updates to California Education Code and California Code of Regulations (CCR), Title 5. Each published edition of the PCAH supersedes preceding editions.

The complete and current text of all California statutes, including the California Education Code sections referred to herein, may be viewed at the California Legislative Information website, http://leginfo.legislature.ca.gov. The complete and current text of all regulations in the California Code of Regulations, Title 5, including those referred to in this Handbook, may be viewed at the Westlaw California Code of Regulations website, https://govt.westlaw.com/calregs. All regulatory references of "Title 5" are to California Code of Regulations, Title 5. Education, Division 6. California Community Colleges.

This edition of the PCAH is organized into two major components: credit curriculum and noncredit curriculum. Each component is divided into three segments as follows:

Credit Curriculum

1. **Introduction to Program and Course Approval**
   Provides an overview of curriculum regulations and includes a brief history of curriculum approval, outlines the legal authority and roles of state and local entities, explains the underlying minimum conditions and open course regulations and how they interact with curriculum development and approval. It also provides a brief introduction to the Chancellor's Office processes, the Chancellor's Office curriculum inventory system, and a list of acronyms and definitions for common curriculum and approval terms, concluding with the Development Criteria for Curriculum statement endorsed by the California Community Colleges Curriculum Committee (formerly known as System Advisory Committee on Curriculum (SACC)).

2. **Credit Course Review Criteria**
   Outlines the curriculum standards and criteria used by Chancellor's Office staff in the review of all types of credit courses. It also covers miscellaneous curriculum standards and topics.

3. **Credit Program Approval Standards**
   Covers all aspects of the curriculum development submission process for Chancellor's Office review and then chaptering of credit programs as per Education Code 70901.b(10). This includes program development standards, submission requirements, approval criteria, supporting documentation, requirements for local approval and regional recommendation, and submission categories.

Noncredit Curriculum

1. **Introduction to Noncredit Program and Course Approval**
   Provides overview of curriculum regulations and includes a brief history of curriculum approval, outlines the legal authority and roles of state and local entities and explains the underlying minimum conditions and open courses regulations and how they interact with curriculum development and approval. It also provides a brief introduction to the Chancellor's Office review process and then chaptering of noncredit programs per Title 5 § 55150, the Chancellor's Office curriculum inventory system, and a list of acronyms and definitions for common curriculum and approval terms, concluding with the Development Criteria for Curriculum statement endorsed by the California Community Colleges Curriculum Committee.

2. **Noncredit Course Criteria and Standards**
   Provides a general overview of noncredit courses, including development guidelines, review criteria, and chaptering and approval standards for courses.

3. **Noncredit Program Criteria and Standards**
   Provides a general overview of noncredit programs, including development guidelines, review criteria, and chaptering and approval standards for programs.

SECTION 2: INTRODUCTION TO PROGRAM AND COURSE APPROVAL

This section provides an overview of program and course approval and identifies portions of the Handbook relevant to credit and noncredit curriculum.

- History and Legal Authority for Curriculum

- Development Criteria

- Open Courses

- Curriculum Regulations

History and Legal Authority for Curriculum

Background

The California Community Colleges Board of Governors, by statute, has statewide responsibility for approving all new instructional programs in community colleges. This mandate is one of the earliest and most basic legislative charges to the Board. Before 1968, approval of programs for junior colleges was the responsibility of the State Board of Education. When the Board of Governors of the California Community Colleges was created by the Legislature in 1968, this responsibility was transferred to the new board. It is now contained in California Education Code section 70901:

> ### 70901: Board of governors; duties; rules and regulations; delegation; consultation
>
> *(b) The board of governors shall . . . perform the following functions:…*
>
> *(b)(10) Review and approve all educational programs offered by community college districts, and all courses that are not offered as part of an educational program approved by the board of governors.*

The Legislature also established the requirement for state approval as part of the finance law for community colleges. This provision was part of the California Education Code for many decades, but in 1991, it was shifted to the California Code of Regulations, Title 5, § 58050:

> ### 58050: Conditions for Claiming Attendance.
>
> *(a) All of the following conditions must be met in order for the attendance of students enrolled in a course to qualify for state apportionment:*
>
> *(1) The course or the program of which it is a part must be approved by the Board of Governors in accordance with the provisions of subchapter 2 (commencing with section 55100) of chapter 6.*
>
> *(2) The course must meet the criteria and standards for courses prescribed by section 55002.*

In 2004, the Chancellor's Office developed the System Advisory Committee on Curriculum (SACC) to coordinate efforts between local and statewide curriculum processes. This committee provides a collaborative forum for statewide discussions pertaining to curriculum to guide related Chancellor's Office policies and practices.

In 2016, the committee endorsed a renaming of the committee to the California Community Colleges Curriculum Committee and updated the committee's charge to reflect its shift from an advisory role to a recommending body.

Minimum Conditions

Minimum Conditions are selected areas of regulations that may result in denial or reduction of state aid if violated. These minimum conditions are contained in title 5, sections 51000-51027. The Minimum Condition regulation on program and course approval is as follows:

51021: Curriculum

Each community college shall establish such programs of education and courses as will permit the realization of the objectives and functions of the community colleges. All courses shall be approved by the Chancellor in the manner provided in subchapter 1 (commencing with section 55000) of chapter 6.

Approval by the Chancellor

Both California Education Code and California Code of Regulations, Title 5, grant other specific authority for the approval of certain types of curriculum to district governing boards, without requiring separate approval by the Board of Governors through the Chancellor's Office. The authority of district governing boards to approve courses without separate approval from the Board of Governors or the Chancellor is established in Education Code § 70902(b)(2), which states that, "The [district] governing board shall establish policies for, and approve, individual courses that are offered in approved educational programs without referral to the board of governors." The minimum conditions set forth in Title 5, § 51021, require that all curriculum must be approved by the Chancellor in a manner consistent with the standards set forth in § 55150, et seq., which falls within the section referenced in § 51021, then reaffirms the authority of district governing boards to approve courses in approved educational programs, stating that they "…need not be separately approved by the Chancellor." Taken together these regulations underscore the complementary, but distinct, roles and authorities for various components of the California Community College system.

All courses and programs that have been approved by the district governing board and have received a control number, whether through Chancellor's Office review or through automated approval via the Annual Course and Program Certification, are then Chaptered by the Chancellor's Office. This is considered to be approval by the Chancellor. A course or program is considered chaptered by the Chancellor's Office when it appears with a valid control number in the Chancellor's Office curriculum inventory system.

Chancellor's Office Curriculum Review

California Education Code and California Code of Regulations, Title 5, provide the mandate on the content of program and course proposals. The Chancellor's Office reviews community college proposals pursuant to Title 5 regulations. Community college course and program approval must be submitted electronically using the California Community Colleges curriculum inventory system. All courses and programs are submitted to the Chancellor's Office for chaptering.

Elements of "approval" processes:

1. The District Governing Board approves the course or program

2. The Regional Consortium recommends the program (only for programs with an occupational goal)

3. The Chancellor's Office chapters the course or program and a control number is issued

Annual Course and Program Certification

Every college is required to submit an Annual Course and Program Certification form that is signed by the college Chief Executive Officer (CEO), Chief Instructional Officer (CIO), Academic Senate President and Faculty Curriculum Chair in order to be eligible for automated chaptering of designated courses and programs. Each September, the Chancellor's Office will provide a memo to the colleges indicating which courses and programs may be certified for automated chaptering, along with the Annual Course and Program Certification form. The form certifies the following:

- Course hours and units are correct in accordance with Chancellor's Office Course Calculations;

- The college/district course outline of record has been approved by the District Governing Board;

- The district governing board has a policy specifying the accepted relationship between contact hours, outside-of-class hours, and credit for calculating credit hours to ensure consistency in awarding units of credit – Title 5 § 55002.5;

- Cooperative work experience courses have local board approval;

- Credit courses and programs that are submitted to the Chancellor's Office curriculum inventory system are accurate and compliant with California Education Code, California Code of Regulations, Title 5, and the current Chancellor's Office Program and Course Approval Handbook (PCAH);

- Credit programs have the required attachments in accordance to the current Chancellor's Office PCAH; and

- Mandatory training for curriculum committees and responsible administrators regarding curriculum rules and regulations to ensure compliance ((CCR, Title 5 §55002(a) (1)).

The form also specifies which courses and programs receive automated approval and which courses and programs must undergo a review by the Chancellor's Office before chaptering.

Once a course or program has gone through the above process and has received a control number, the college is then authorized to:

- Publish the description of a new program or course in the catalog or publicize a new program or course in other ways (CCR., Title 5, § 55005).

- Schedule and collect state apportionment for student attendance in the required courses and restricted electives that are part of a credit program (Ed. Code § 70901(b) (10); CCR, Title 5, §§ 55130 and 58050). Colleges that do not secure the required program approval are subject to loss of revenues through audit or administrative action.

- Award a degree or certificate with the designated title and require specific courses for the completion of such degree or certificate (Ed. Code, §§ 70901(b)(10) and 70902(b)(2)). Degree or certificate awards for programs that have not been reviewed and chaptered by the Chancellor's Office when required will not be recognized as valid for any audit or accountability purpose.

- List credit certificates and degrees on student transcripts (CCR, Title 5, §§ 55060-55072).

- Collect Related and Supplemental Instruction (RSI) funding if the Division of Apprenticeship Standards (DAS) has also formally approved a proposed apprenticeship program.

Colleges submitting the Annual Course and Program Certification form are subject to the following conditions relative to automated approval:

- Colleges will have their curriculum reviewed on a regular basis as determined by the Chancellor's Office.

- Colleges that have been found to have curriculum that does not meet all requirements will be contacted by the Chancellor's Office.

- Colleges may be encouraged to have an assistance visit by representatives from the CO, CIOs, and ASCCC.

- Colleges that do not follow the requirements for automated approval will have the automated approval disabled and all curriculum will need to be reviewed by the Chancellor's Office before a control number will be issued (Title 5 §§ 55100, 55130, 55150).

Development Criteria

Five criteria are used by the Chancellor's Office to approve credit programs and noncredit programs and courses that are subject to Chancellor's Office review. They were derived from statute, regulation, intersegmental agreements, guidelines provided by transfer institutions and industry, recommendations of accrediting institutions, and the standards of good practice established in the field of curriculum design. These criteria have been endorsed by the community college system as an integral part of the best practice for curriculum development.

The five criteria are as follows:

- Appropriateness to Mission

- Need

- Curriculum Standards

- Adequate Resources

- Compliance

Criteria A: Appropriateness to Mission

The stated goals and objectives of the proposed program, or the objectives defined in the Course Outline of Record (COR), must be consistent with the mission of the community colleges as established by the Legislature in Education Code § 66010.4. For courses or programs to be mission appropriate, they must provide systematic instruction in a body of content or skills whose mastery forms the basis of student achievement and learning.

The California Community Colleges offers five types of curriculum that fall within the mission of the community colleges: degree-applicable credit, nondegree-applicable credit, noncredit, contract education, and fee-based community service classes (not-for-credit). State chaptering is required for credit programs and for noncredit programs and courses.

The following are points to consider in evaluating how a program or course fits within the system's mission:

- A program or course must be directed at the appropriate level for community colleges; that is, it must not be directed at a level beyond the associate degree or the first two years of college. Those colleges that have been approved to offer a baccalaureate degree may offer baccalaureate level courses appropriate to general education and the major.

- A program or course must address a valid transfer, occupational, basic skills, civic education, or lifelong learning purpose. It must not be primarily avocational or recreational.

- Programs and courses should also be congruent with the mission statement and master plan of the college and district.

In addition, a course must provide distinct instructional content and specific instructional objectives. Non-instructional activities and services, such as assistive or therapeutic activities, use of college facilities or resources without specific instructional objectives, or assessment testing are not considered to be courses and are not supported by apportionment.

Criteria B: Need

The proposal must demonstrate a need for a program or course that meets the stated goals and objectives in the region the college proposes to serve with the program. Furthermore, a proposed new program must not cause harmful competition with an existing program at another college.

Need is determined by multiple factors, such as the educational master plan of the college or district and accreditation standards. Colleges are required to periodically review curriculum as part of the program review process. Both new and revised curriculum should reflect the fulfillment of this planning.

For baccalaureate preparation curriculum, need is presumed to exist if there is student demand for a program or course and its transfer applicability for a university major or general education (GE) has been documented. The proposal for approval must include evidence that the coursework required for the community college program substantially satisfies the lower-division coursework requirements for a university major or for General Education (GE) requirements at the four-year institution.

For college preparation noncredit curriculum, need is presumed to exist if there is a student demand for a program or course and its transition to credit work has been documented. For both credit and noncredit Career Technical Education (CTE) programs, or those that respond to economic development interests, need for the program must be documented by supplying current labor market information (LMI) within the local service area of the individual college and/or a recent employer survey as per Education Code 78015. In addition, a current job market analysis, or other comparable information, must show that jobs are available for program completers within the local service area of the individual college and/or that job enhancement or promotion justifies the proposed curriculum.

However, if cooperative planning with neighboring colleges has occurred, labor market evidence for the region as a whole may be sufficient. Statewide or national labor market evidence may be included as supplementary support, but evidence of need in the specific college service area or region is also necessary. If the college believes the program has statewide or national importance and wishes to substitute statewide or national labor market evidence for local evidence, an explicit justification of why this is appropriate must be included.

Proposals for credit CTE programs must include a recommendation from the appropriate CTE Regional Consortium as per title 5, section 55130(b)(8)E. The community colleges in California are organized into ten economic regions, served by seven consortia of CTE faculty and administrators from community colleges in that region.

The CTE Regional Consortia provide leadership for colleges to:

- Integrate and coordinate economic development and CTE programs and services,

- Develop and coordinate staff development,

- Increase the knowledge of programs and services in the region, and disseminate best practices.

Evidence of labor market need may be submitted in the form of:

- Statistical projections of growth in specific jobs by county (or labor market area) from the Employment Development Department's (EDD) Labor Market Information (LMI) system

- Recent employer surveys

- Industry studies

- Regional economic studies

- Letters from employers

- Minutes of industry advisory committee meetings (when offered in conjunction with other evidence)

- Job advertisements for positions in the individual college's service area

- Newspaper or magazine articles on industry or employment trends

- Studies or data from licensing agencies or professional associations

Further specifics on documenting labor market need can be found in Part II: Credit Curriculum and Part III: Noncredit Curriculum.

Criteria C: Curriculum Standards

Title 5 mandates that all credit and noncredit curriculum must be approved by the college curriculum committee and district governing board pursuant to Title 5, beginning with § 55100. Title 5, § 55130(b)(8)(E), also requires that CTE credit programs must be recommended by CTE Regional Consortia, where applicable. The proposed program or course should also be consistent with requirements of accrediting agencies as applicable.

When a college is submitting a program for chaptering, the Chancellor's Office requires that the college provide a program narrative addressing the elements required in Title 5, § 55130 along with supporting documentation from advisory committees, local industry, and transfer institutions as needed for the program type.

The application process and forms are intended to ensure the following:

- The program is designed so that successful completion of the program requirements will enable students to fulfill the program goals and objectives.

- Programs and courses are integrated, with courses designed to effectively meet their objectives and the goals and objectives of the programs for which they are required.

- The COR meet all the requirements of Title 5, § 55002 for credit and noncredit course requirements.

The Academic Senate for California Community Colleges (ASCCC) provides additional information about best practices for curriculum development that faculty developers and college curriculum committees may find useful. Links for curriculum resources are available on the ASCCC Curriculum website, www.ccccurriculum.net.

Criteria D: Adequate Resources

The college must demonstrate that it has the resources to realistically maintain the program or course at the level of quality described in the proposal. This includes funding for faculty compensation, facilities and equipment, and library or learning resources. Additionally, the college must demonstrate that faculty are available to sustain the proposed required course(s) and to facilitate student success. The college must commit to offering all required

courses for the program at least once every two years, unless the program goals and rationale for the particular program justify or support a longer time frame as being in the best interests of students.

Criteria E: Compliance

The design of the program or the course may not be in conflict with any state or federal laws, statutes or regulations. Laws that particularly affect community colleges, as well as any other laws that may affect the program or course, such as licensing laws in a particular occupation, need to be considered. Some of the Title 5 sections to note are:

- Open course regulations (CCR, Title 5, § 51006)

- Course repetition and repeatability regulations (CCR, Title 5, §§ 55040-55046 and 58161)

- Regulations regarding tutoring and learning assistance (CCR, Title 5, §§ 58168-58172)

- Regulations regarding open/entry open exit courses (CCR, Title 5, § 58164)

- Statutes and regulations on student fees (CCR, Title 5, chapter 9, subchapter 6)

- Prerequisite and enrollment limitation regulations (CCR, Title 5, § 55003)

- Particular provisions of the Nursing Practice Act (CCR, Title 16)

Open Courses

Title 5, § 51006 requires colleges to publish a statement in the official catalog and schedule of classes that all course sections or classes for which state aid is awarded are open to enrollment and participation by any person admitted to the college. The college may only restrict enrollment in a course when the restriction is specifically required by statute or legislation. This section also allows colleges to require that students meet prerequisites that have been established pursuant to Title 5, § 55003.

Situations where enrollment limitation may be allowed are discussed more specifically in Title 5, § 58106. These sections allow the college to restrict students from enrolling in a course when the following are true:

- Prerequisites, corequisites, or other advisories on recommended preparation have been established for the course and/or;

- Health and safety considerations, facility limitations, faculty availability, funding limitations, or other constraints have been imposed by statutes, regulations, or contracts.

The college can limit enrollment only through one or more of the following approaches:

- Enrolling on a "first-come, first-serve" basis or other non-evaluative selection technique (CCR, Title 5, § 58006)

- Offering special registration assistance to the handicapped or disadvantaged student

- Enrolling in accordance with a priority system established by the district governing board

- Allocating available seats to students who have been judged most qualified in the case of intercollegiate competition, honors courses, or public performance courses

- Limiting enrollment to a cohort of students enrolled in two or more courses, provided, however, that a reasonable percentage of all sections of the course do not have such restrictions

- Restricting enrollment of a student on probation or subject to dismissal to a total number of units or to selected courses or of a student who is required to follow a prescribed educational plan

The open course concept means that no course may be offered for apportionment if it is restricted to a particular group, such as employees of a particular company or organization, students concurrently enrolled in a neighboring university, persons of a particular ethnicity, or any other narrowly defined group. Furthermore, although a course may be designed primarily for individuals in a particular group (for example, individuals already employed in a particular occupation), it may not be offered for apportionment unless it is open to, and designed in such a way that it could also be of benefit to, other students. Thus, a course may be primarily intended for skills upgrading of individuals already experienced in a particular occupation, but it must also be possible for a student in training for that occupation to take and benefit from the course, subject to legally established prerequisites as described below.

Certain narrow exceptions to the open course rule are specified in law. These include enrollment preference for fire service personnel (CCR, Title 5, § 58051(d)) and law enforcement trainees (Pen. Code, § 832.3(c)), courses conducted in a jail or federal prison (CCR, Title 5, § 58051.6), students who are part of a cohort concurrently enrolled in another specified course (CCR, Title 5, § 58106), and apprentices in "related and supplemental instruction" courses (Lab. Code, § 3076.3).

Curriculum Regulations

The legal parameters and standards for curriculum are established in sections of Education Code and California Code of Regulations as listed in tables 1 and 2.

Table 1 — California Education Code

Code Section Number	Laws and Regulations
70900	Creation of the System
70901	Board of Governors
70902	District Governing Board Approval of Curriculum

Table 2 — California Code of Regulations, Title 5. Education, Division 6. California Community Colleges, Chapter 6. Curriculum and Instruction

Code Section Number	Laws and Regulations
55000.5	Handbook; Monitoring and Review of Approved Courses and Programs
55002	Standards and Criteria for Courses
55002.5	Credit Hour
55003	Policies for Prerequisites, Corequisites and Advisories on Recommended Preparation
55005	Publication of Course Standards
55006	Records and Reports
55040	District Policy for Course Repetition
55041	Repeatable Courses
55042	Course Repetition to Alleviate Substandard Academic Work
55060	District Policy
55061	Philosophy and Criteria for Associate Degree and General Education
55062	Types of Courses Appropriate to the Associate Degree
55063	Minimum Requirements for the Associate Degree
55070	Credit Certificates
55072	Award of Certificates
55100	Course Approval
55130	Approval of Credit Programs
55150	Approval of Noncredit Courses and Programs
55153	Other Noncredit Programs Providing 288 Hours or More of Instruction
55154	Adult High School Diploma Program
55155	Noncredit Certificates
55160	Approval of Community Service Offerings
55170	Contract Courses
55180	Definitions
55182	Assessment of Needs and Preferences
55183	Identification of Objectives

Code Section Number	Laws and Regulations
55184	Analysis of Alternative Delivery Systems
55185	Additional Criteria for Approval of Educational Centers
55200	Definition and Application
55250	Approved Plan Required
55250.3	"Work Experience Education"
55252	Types of Cooperative Work Experience Education
55522	English and Mathematics Placement and Assessment
58160	Noncredit Course Funding
58161	Apportionment for Course Enrollment
58164	Open Entry/Open Exit Courses
58168	Tutoring
58170	Apportionment for Tutoring
58172	Learning Assistance

Table 3 — Alphabetical List of Acronyms

Acronym	Definition
AA	Associate of Arts
AAM	Articulation Agreement by Major
AA-T	Associate in Arts for Transfer
AB	Assembly Bill
ACCJC	Accrediting Commission for Community and Junior Colleges
ADT	Associate Degree for Transfer
AHSD	Adult High School Diploma
AS	Associate of Science
AS-T	Associate in Science for Transfer
ASCCC	Academic Senate for California Community Colleges
ASSIST	Articulation System Stimulating Interinstitutional Student Transfer
BCT	CSU Baccalaureate Level Course List by Department
C-ID	Course Identification Numbering System
CB	Course Basic
5C	California Community Colleges Curriculum Committee

Acronym	Definition
Chancellor's Office	California Community Colleges Chancellor's Office
CDCP	Career Development and College Preparation
COR	Course Outline of Record
CIP	Classification of Instructional Programs
CSU	California State University
CSU GE-Breadth	California State University General Education-Breadth
CTE	Career Technical Education
DAS	Division of Apprenticeship Standards
DED	Data Element Dictionary
DSPS	Disabled Students Programs and Services
EDD	Employment Development Department
ESL	English as a Second Language
ETAC	Educational Technologies Advancement Committee
FII	Fund for Instructional Improvement
FTES	Full-time Equivalent Students
GECC	CSU GE Certification Course List by Area
HBA	Hours by Arrangement
ICAS	Intersegmental Committee of Academic Senates
IGETC	Intersegmental General Education Transfer Curriculum
IMC	Intersegmental Model Curriculum
JAC	Joint Apprenticeship Committee
LMI	Labor Market Information
LMID	Labor Market Information Division
MC	Model Curriculum
MIS	Management Information Systems
NPA	Nursing Practice Act
OES	Occupational Employment Statistic
PCAH	Program and Course Approval Handbook
RN	Registered Nurse
RSI	Related and Supplemental Instruction

Acronym	Definition
SACC	System Advisory Committee on Curriculum
SAM	Student Accountability Model
SB	Senate Bill
SCANS	Secretary of Labor's Commission on Achieving Necessary Skills
SOC	Standard Occupational Classification
STEM	Science, Technology, Engineering and Mathematics
TBA	To be Arranged
TCSU	Transfer California State University (CSU)
TMC	Transfer Model Curriculum
TOP	Taxonomy of Programs
UC	University of California
WASC	Western Association of Schools and Colleges

Definitions and Terms

Catalog Description

The catalog description should summarize the purpose and goals of the course and subject matter to be covered. In those cases where the purpose of the course is to serve a special population, (e.g., older adults, immigrants, persons with substantial disabilities, parents), the catalog description must demonstrate that the course is designed to meet the interests and needs of that target population.

Objectives

Objectives should clearly specify what students should know and/or be able to do upon successful completion of the course.

Note: The term "objectives" is used in Title 5. The term "learning outcomes" is used in the ACCJC Eligibility Requirements, Standards, and Commission Policies per federal requirements. Definitions and use of the two terms may differ depending on local practice.

Course Content

Content, in terms of a specific body of knowledge, should depict the scope and depth of topics or subjects to be covered by the course.

Instructional Methodology

Instructional methodology identifies the key methods and activities used to deliver instruction, including, but not limited to, lecture, laboratory, distance education, and independent study.

Examples of Assignments

Examples of assignments and/or activities may include but are not limited to written assignments, special projects and field trips. They should be representative of the types of assignments used by faculty to promote and enhance student learning and achievement of course objectives.

Methods of Evaluation

Methods of evaluation for determining student achievement of stated objectives should include the identification and description of assessment or evaluation tools used by the faculty to determine student progress towards achievement of the course objectives. Merely taking attendance or asking if students are satisfied with the course is not sufficient to constitute evaluation of the extent to which students are making progress toward the learning objectives of the course.

PART II: CREDIT CURRICULUM

SECTION 1: CREDIT COURSE CRITERIA

This section provides an overview of the criteria used by Chancellor's Office staff in evaluating credit course submissions. The review criteria are rooted in the curriculum standards established in Title 5, §55000 et seq. and explained in the Credit Course Standards section of this Handbook. To ensure that standards for all criteria are met, colleges are required to submit and retain the records of the following:

- Criteria for Credit Course Submissions

- Criteria for Data elements

- Criteria for the Course Outline of Record (COR)

Criteria for Credit Course Submissions

Local districts are responsible for ensuring that submitted course outlines of record (COR) contain the required elements specified in Title 5, § 55002, and that local approval is consistent with all standards in § 55000 et seq. The Chancellor's Office periodically reviews credit course submissions to ensure that the associated data elements for each course are correct and compliant with regulations. The review criteria used by Chancellor's Office staff are based on the standards for course curriculum established in Title 5 and explained in the Credit Course Standards section of this Handbook.

Submission and validation of credit courses is conducted through review of the following components submitted by local colleges:

- Completed Curriculum Inventory Proposal Fields for Data Elements

- Course Outline of Record (COR) meeting the standards in Title 5, § 55002, and approved by the district governing board.

Criteria for Data Elements

The following data elements are entered into the Chancellor's Office curriculum inventory and validated via technology during the submission review process. The Chancellor's Office MIS Division identifies some of these data elements as Course Basic (CB) codes. Many course elements require CB codes. Other course elements such as District Governing Board Approval Date and Catalog Description do not require CB codes, but are critical components of the submission and chaptering process. Entry errors associated with these elements can result in flags when Chancellor's Office staff conducts periodic reviews of curriculum approved by District Governing Boards and chaptered via the Chancellor's Office curriculum inventory system.

Table 4 — Data Element Dictionary (DED)

DED Number	Data Element Name
CB00	Course Control Number (this number is assigned by the Chancellor's Office, it is not necessary for new courses.
CB01	Course Department and Number
CB02	Course Title
CB03	Course TOP Code
CB04	Course Credit Status
CB05	Course Transfer Status
CB06	Units of Credit – Maximum
CB07	Units of Credit – Minimum
CB08	Course Basic Skills Status
CB09	Course SAM Priority Code

DED Number	Data Element Name
CB10	Course Cooperative Work Experience Education Status
CB11	Course Classification Status
CB13	Educational Assistance Class Instruction (Approved Special Class)
CB21	Course Prior to Transfer Level
CB23	Funding Agency Category
CB24	Course Program Status
CB25	Course General Education Status
CB26	Course Support Status

Course basic record (CB) codes are used to identify particular components of course curriculum for tracking, reporting, and apportionment.

CB01: Department and Number

This identifier should be structured to include an abbreviation of the department to which the course belongs, followed by the numbers and/or letters used to distinguish it from other courses in the same department. It is the identifier that occurs on the student's academic transcript, for example: ARTS 110. The department number must be entered exactly as it is entered into the college and/or district's enterprise resource system. If there are no spaces between the department and course number, do not add a space in the CI. Inconsistencies in data entry will impact MIS reporting.

CB02: Course Title

This data element records the course title exactly as it appears in the COR and the college catalog. If the college uses long and short titles, enter the long title. This field is limited to a maximum of 68 characters including punctuation and spaces, and must be different from CB01.

CB03: Taxonomy of Programs Code

This field is for recording the appropriate TOP Code for the course. An asterisk (*) in this field denotes a vocational TOP Code. A link to the Taxonomy of Programs (TOP) Code Manual, 6th Edition is available on the Chancellor's Office website, under the Educational Services webpage.

The TOP Code should be assigned according to the content and outcomes of the course, and must conform closely to the TOP Code given to similar courses at other colleges around the state. The TOP Code reflects the main discipline or subject matter and is not based on local departmental structure, faculty qualifications, or budget groupings. A college that has difficulty identifying the most appropriate TOP Code should contact the Chancellor's Office; if the proposed TOP Code does not seem appropriate, the Chancellor's Office will advise the college.

CB04: Credit Status

This element indicates the credit status of a course (defined in Title 5, § 55002). All credit courses will use either a "D" (degree applicable) or "C" (not degree applicable) in this field, indicating the appropriate type of credit course.

CB05: Transfer Status

This element indicates the transfer status of a course. The local college determines CSU transferability during the curriculum approval process. The designation of UC transferable requires UC approval. For the purposes of course submissions, the UC transferability indicated in this data element can be aspirational and subsequently amended if the course is denied this status upon UC review.

CB06: Course Units Maximum

This element indicates the maximum number of units (semester or quarter) of academic credit a student may earn from enrolling in a single section of the course. This number is entered as a decimal, for example, one and one-half unit would be entered as 1.5. This number is greater than or equal to the number entered for CB07. The unit value in this field must match the maximum unit value listed on the COR, which is consistent with unit calculations as set forth in Title 5, § 55002.5 and explained in the standards for credit hour calculations in Part l, Section 2 of this Handbook.

CB07: Course Units Minimum

The minimum number of semester or quarter units of academic credit a student may earn from enrolling in a single section of the course is entered as a decimal. For example, one-half unit would be entered as 0.5. This number is less than or equal to the number entered for CB06. If sections with variable units of credit are not permitted for this course, enter the same value in this field and in Units of Credit Maximum (CB06). The unit value in this field must match the minimum unit value listed on the COR, which is consistent with unit calculations as set forth in Title 5, § 55002.5, and explained in the standards for credit hour calculations in Part l, Section 2 of this Handbook.

CB08: Basic Skill Status

The basic skills status is indicated as either B (Course is a basic skills course) or N (Course is not a basic skills course). If this element is coded as B (Course is a basic skills course), then the previously selected CB04: Credit Status must be C – Not Degree-Applicable.

CB09: Student Accountability Model (SAM) Priority Code

This element is used to indicate the degree to which a course is occupational, and to assist in identifying course sequence in occupational programs. The SAM Priority Code selected must correspond with the CB03: TOP Code selected. For example, if a vocational TOP Code is selected as denoted by an asterisk (*), then CB09: SAM Priority Code must equal A (Apprenticeship), B (Advanced Occupational), C (Clearly Occupational), or D (Possibly Occupational) and respectively cannot equal E (Non-occupational).

CB10: Cooperative Work Experience

This element indicates whether the course is part of a cooperative work experience education program, according to the provisions of Title 5, § 55252, and will be coded "C" (Is part of a cooperative work experience educational program) or "N" (Is not part of a cooperative work experience educational program).

CB11: Course Classification Status

This element identifies courses eligible for enhanced funding. In COCI, select one of the following codes: Use code "J" if the course is part of an approved noncredit program in the area of Workforce Preparation authorized by title 5, section 55151; use code "K" if the course has been approved for noncredit enhanced funding, but does not meet the criteria for "J"; or use code "L" if the course has not been approved for noncredit enhanced funding and does not meet the criteria for "J" or "K" (course is not eligible for CDCP enhanced funding).

CB13: Educational Assistance Class Instruction (Approved Special Class)

This data element indicates whether the course is "educational assistance class instruction" according to the provisions of title 5, section 56028, and will be coded "S" (Course is designated as an approved special class for students with disabilities) or "N" (Course is not a special class).

CB21: Prior Transfer Level

This element indicates course level status for English writing/reading, ESL, mathematics/quantitative reasoning courses. The English writing/reading and mathematics/quantitative reasoning rubrics were updated spring 2019. The ESL rubrics were updated fall 2019.

Indicate the relationship of the course to college level by selecting one of the following seven options:

Y - Not applicable

A - One level below transfer

B - Two levels below transfer

C - Three levels below transfer

D - Four levels below transfer

E - Five levels below transfer

F - Six levels below transfer

For example, a course such that when the student successfully completes the course means the student is ready for transfer level would be coded as "A". Some courses may span several levels.

The selected code must correspond with the CB05: Transfer Status selected, as well as with processing edit checks in the Chancellor's Office MIS Data Element Dictionary (DED); please consult the DED for a complete listing of fidelity and integrity checks for this element. Additionally, extensive rubrics were created to determine appropriate coding for this element. These rubrics can be found on the Basic Skills Initiative website, www.cccbsi.org.

CB22: Noncredit Category

This field is auto-populated with "Y" denoting the Credit Course is Not Applicable.

CB23: Funding Agency Category

This element describes whether or not a Chancellor's Office Workforce and Economic Development grant was used to fully or partially develop a course and/or curriculum.

Select one of the following three options:

A - primarily developed using Economic Development funds

B - partially developed using Economic Development Funds, exceeding 40% of total development costs

Y - not applicable

CB24: Program Status

This element indicates whether or not a course is part of an educational program as defined in Title 5, § 55000.

Select one of the two following options:

1 - Program-applicable – the noncredit course is part of a sequence of courses or program that results in a certificate of completion or certificate of competency

2 - Not Program-applicable – the noncredit course is not part of a sequence of courses or program that results in a certificate of completion, certificate of competency, adult high school diploma program, or noncredit apprenticeship program

CB25: Course General Education Status

This element indicates whether a course fulfills general education requirements for mathematics/quantitative reasoning or English composition/critical thinking in the context of transfer, degree, and certificate programs. Select one of the following four options:

A - Course meets any of the following:

- CSU General Education Breadth Area A2: Written Communication
  CSU General Education Breadth Area A3: Critical Thinking
  UC IGETC Area 1A: English Composition
  UC IGETC Area 1B: Critical Thinking-English Composition

  OR

- Course has a general education certification or articulation agreement that ensures the course fulfills English composition requirements at an accredited four-year institution

  OR

- Course fulfills local general education requirements for English Composition as outlined in Title 5 § 55063

B - Course meets any of the following:

- CSU General Education Breadth Area B4: Mathematics/Quantitative Reasoning UC IGETC Area 2: Mathematical Concepts and Quantitative Reasoning

  OR

- Course has a general education certification or articulation agreement that ensures the course fulfills mathematics or quantitative reasoning requirements at an accredited four-year institution

D - Course is not transferrable to fulfill general education mathematics or quantitative reasoning at a four-year institution, but fulfills local general education requirements for Analytical Thinking or Mathematics Competency as outlined in Title 5 § 55063

Y - Not Applicable

If the course is coded "A" or "B", then the CB05 code must be "A" or "B". If the course is coded as "C" then the CB04 code must be "D". This field is auto-populated with "Y" denoting "not applicable". The college will update this code when appropriate.

CB26: Course Support Course Status

This element indicates whether a course is associated with another degree-applicable course for the purpose of providing the support necessary to complete the associated course. Courses are coded S (course is a support course) or N (course is not a support course).

This field is auto-populated with "N" denoting "course is not a support course". The college will update this code when appropriate.

District Governing Board Approved

The college certifies that the district governing board, pursuant to Title 5, §§ 55002 and 55100, approved the course by selecting "Yes."

District Governing Board Approval Date

This section requires the date that the district governing board, pursuant to Title 5, §§ 55002 and 55100, originally approved the course.

Catalog Description

Enter the catalog description exactly as it appears in the COR and the college catalog.

Criteria for the Course Outline of Record

The Chancellor's Office review and chaptering processes require the submission of a COR that meets the standards for courses established in Title 5, § 55002, and contains, at a minimum, the following elements:

COR Components Required for Credit Courses

- Unit value

- The expected number of contact hours

- The expected number of outside of class hours

- The expected number of total student learning hours for the course as a whole

- Prerequisites, corequisites or advisories on recommended preparation (if any) for the course

- Catalog description

- Objectives

- Content in terms of a specific body of knowledge

- Types or examples of required reading and writing assignments

- Types or examples of other outside-of-class assignments

- Types or examples of instructional methodology

- Types or examples of methods of evaluation

In addition to verification of the above COR components, validation within the Chancellor's Office curriculum inventory system and the Chancellor's Office periodic review criteria focuses on the validation of two components of the COR for consistency with regulations and MIS data elements: Unit Values and Contact Hours.

Unit Value

The unit value listed on the COR must conform to the standards for unit calculation set forth in Title 5, § 55002.5 and be consistent with the unit values entered into the minimum and maximum unit fields in the Chancellor's Office curriculum inventory system. The relationship of hours to units must be based on the unit calculation method appropriate to the course type, expressed in total hours for an entire term. Standards for credit hour calculations are contained in Title 5, §§ 55002.5, 55002(a)(2)(B), and 55002(b)(2)(B). Courses not classified as cooperative work experience, clock hour, or open entry/open exit use the following method for calculating units of credit:

(Total Contact Hours + Outside-of-class Hours)

Hours-per-unit Divisor

The result of this calculation is then rounded down to the nearest .5 increment or to the nearest fractional unit award used by the district, if smaller than .5. This formula applies to both semester and quarter credit calculations. Zero-unit credit courses are not permissible.

Credit hour calculations, as established in Title 5, § 55002.5(a), are based on total student learning hours, defined as the sum of inside and outside-of-class hours or all contact and homework hours. While this section does not define ratios for in-class to outside-of-class work, as a matter of standard practice in higher education, lecture credits assume that students will spend two hours outside-of-class for every hour in class; laboratory credits, particularly in natural sciences laboratory and health occupations, clinicals are typically calculated only on hours spent in the classroom, with minimal or no outside-of-class hours expected; and activity courses, studio courses, laboratory with homework, and other similar credit categories typically assume one hour of homework for every two hours of work in class. Variations on standard practices for in-class to outside-of-class ratios, clock hour programs, cooperative work experience courses, and open entry/open exit standards are discussed in greater detail in the Credit Course Standards section of this Handbook. The governing board of each college district must have an established policy for credit calculations, ensure that practices are compliant with state and federal laws and are aligned with standard practices in higher education. Failure to follow standard patterns can jeopardize course articulation and transferability, as well as apportionment and financial aid.

The COR for many districts does not specify the outside-of-class hours, relying instead on the assumption of traditional ratios for inside to outside-of-class hours for lecture, laboratory, or other course formats. In instances where districts only record total contact hours for the course as a whole or in each instructional category on the COR, the calculation of credit hours must include the expected hours of student work outside-of-class as described above. When this information is not included on the COR, periodic audits of course submissions may require clarification of local policy and practices for awarding credit hours to ensure that colleges are properly accounting for outside-of-class hours in their calculations. This is described in greater detail in Calculation Categories and Outside-of-Class Hours.

Contact Hours

Contact hours are defined as the total time per term that a student will be under the direct supervision of an instructor or other qualified employee as defined in Title 5, §§ 55002(a)(3) and 58161. Contact hours are the basis for apportionment and are a required component of the COR.

SECTION 2: CREDIT COURSE STANDARDS

This section provides an overview of the standards for all credit course curricula, including requirements for local approval, the course outline of record, MIS data elements, credit course categories, credit hour calculations, and standards for particular course types. This section is organized as follows:

- The Course Outline of Record

- Course Types and Definitions

- Standards for Approval

- Standards for Credit Hour Calculations

- Other Course Types and Standards

The Course Outline of Record

All credit courses are required to have an official Course Outline of Record (COR) that meets the standards in Title 5, § 55002(a)(3). Current CORs must be maintained in the official college files (paper or electronic database) and made available to each instructor. The following COR components are required for credit courses:

COR Components Required For Credit Courses

- Unit value

- The expected number of contact hours

- The expected number of outside of class hours

- The expected number of total student learning hours for the course as a whole

- Prerequisites, corequisites or advisories on recommended preparation (if any) for the course

- Catalog description

- Objectives

- Content in terms of a specific body of knowledge

- Types or examples of required reading and writing assignments

- Types or examples of other outside-of-class assignments

- Types or examples of instructional methodology

- Types or examples of methods of evaluation

It is recommended that CORs also include, at a minimum, the following elements:

Recommended Elements For Credit CORs

- Course number and title

- Status (noncredit versus credit or others)

- Enrollment limitations (if any)

- Repeatability

- Content in terms of a specific body of knowledge

- Objectives

- Field Trips

- Student Learning Outcomes (in COR or addendum – ACCJC requires student learning outcomes to be in official course outline)

- Representative Textbook(s), including open educational resources that meet course standards (necessary for articulation)

These standards place the burden of rigor upon the curriculum committee to determine that course elements of the COR are appropriate to the intended students.

In addition to these components, Chancellor's Office review of credit courses requires the submission of all MIS data elements listed in the previous section of this Handbook. While there is no regulatory requirement that these are listed on the COR, good practice suggests that MIS data elements should be included as part of the local curriculum review and submission process, whether on the COR or on attachments to the COR.

For a detailed discussion of good practices related to COR development and explanations of the standards for local course approval set forth in Title 5, refer to the Academic Senate for California Community Colleges (ASCCC) paper titled, The Course Outline of Record: A Curriculum Reference Guide Revisited (2017), and can be downloaded from the ASCCC website (www.asccc.org) under the "publications" tab.

Course Types and Definitions
Credit courses are classified under one or more of the following basic course definitions to determine appropriate standards, criteria, and approval processes:

- Program Applicable

- Degree-Applicable

- Nondegree-Applicable

- Stand-Alone

Program Applicable
A course is considered program applicable if it meets one of these criteria:

- The course is required for a degree or certificate in an approved program that has been chaptered by the Chancellor's Office;

- When a course is on a list of restricted electives for a degree or certificate, specified by course title or number, from which students are required to choose to achieve a degree or certificate in an approved program that has been chaptered by the Chancellor's Office; or

- The course is part of an approved general education (GE) pattern such as IGETC, CSU-GE Breadth, or a local pattern conforming to the requirements in title 5.

A course is not considered program applicable when it is only required for a certificate that has been approved locally, but not chaptered by the Chancellor's Office, such as a certificate requiring fewer than 16 semester or 24 quarter units. A program is considered chaptered by the Chancellor's Office when it appears with a valid control number in the Chancellor's Office curriculum inventory system. When new courses are submitted as part of a new or modified program that have not yet been chaptered, these courses may be submitted as "program applicable" during the new course and program submission process.

Degree-Applicable

A course is considered to be degree-applicable when it has been designated as appropriate to the associate degree in accordance with the requirements of Title 5, § 55062 and has been recommended by the college and/or district curriculum committee and approved by the district governing board.

This section establishes the following types of courses as degree-applicable:

- All lower division courses accepted toward the baccalaureate degree by UC or CSU

- Courses accepted for transfer to the UC or CSU systems (CB05)

- Courses within a TOP Code designated as vocational, which are part of an approved CTE program

- English composition or reading courses not more than one level below the first transfer level course. ESL courses may not be considered under this definition

- All mathematics courses above and including Elementary Algebra

- Credit courses in English or mathematics taught in or on behalf of other departments that are at a level comparable to transferable freshman composition (for English) or comparable to elementary algebra (for mathematics)

Nondegree-Applicable

The category of credit, nondegree-applicable courses was created by regulatory amendments adopted by the Board of Governors in 1986, and includes the following types of courses:

- Basic skills courses as defined in Title 5, § 55000(t) and (u)

- Courses designed to help students succeed in degree-applicable credit courses that integrate basic skills instruction throughout and assign grades partly upon the demonstrated mastery of those skills

- Pre-collegiate CTE preparation courses designed to provide foundational skills for students preparing for entry into degree-applicable CTE courses or programs

- Essential career technical instruction for which meeting the standards of subdivision (a) is neither necessary nor required

Title 5, § 55002(b) requires that nondegree-applicable credit courses be approved by the college curriculum committee and district governing board.

Stand-Alone

When a course is **not** a part of an approved program as defined above, it is referred to as a "stand-alone course". Stand-alone courses are identified in CB24, where it has been coded using the number "2." This term also refers to credit courses that are required for a certificate of fewer than 16 semester or 24 quarter units that has not been approved and chaptered by the Chancellor's Office as a Certificate of Achievement. All stand-alone courses, including experimental courses and selected topics courses as described below, must have a control number prior to being offered and claimed for apportionment. The CORs for stand-alone courses must contain all required elements and adhere to the same standards as other credit courses.

A community college district may approve and offer nondegree-applicable credit courses and degree-applicable credit courses that are not part of an approved educational program without review by the Chancellor. However, stand-alone credit courses still need to be submitted to the Chancellor's Office for chaptering and to receive a control number. The Chancellor will conduct a periodic review to ensure that colleges and districts are compliant with Title 5 regulations. Please refer to Title 5, § 55100(b) for full language.

Experimental and Special Topics Courses

One type of stand-alone credit course is the "experimental" course. In general, an experimental course is one for which full information on some approval criterion, such as feasibility or need, cannot be determined until the course is actually offered on a pilot basis. After an experimental course has been offered twice, it must be submitted to the college curriculum committee for approval as a regular course, or the college must discontinue offering the course as experimental. As noted above, experimental courses must be submitted to the Chancellor's Office curriculum inventory system and receive a control number in order for the college to claim apportionment.

A "special topics" course is one which employs a consistent disciplinary framework, but for which the specific focus may change from term to term. For example, a college may develop a Special Topics in Political Science or Current Events in Political Science course in which the content will be different in each term, but the basic disciplinary framework is consistent. If a particular topic is addressed regularly, it should be approved as a regular course. At some colleges, special topics may not be defined as narrowly as this. Some colleges may use the terminology "special topics" in lieu of "experimental." These terms are not defined in title 5, and may be established by a local district policy; however, the CORs for these courses must meet all requirements and standards.

Standards for Approval

All credit and noncredit courses offered by a community college are subject to approval by the district governing board (often called "local approval") and must include review by a curriculum committee established in accordance with Title 5, § 55002. The curriculum

committee and the governing board must determine that the course meets the standards of Title 5, §§ 55002, 55002.5, 55003, 55062, and all other applicable provisions of Title 5. These standards are explained in the ASCCC paper, [The Course Outline of Record: A Curriculum Reference Guide Revisited](#) (2017). In addition, all courses must be appropriate to the mission of the California community college system, as defined in Education Code section 66010.4, and must be consistent with the requirements of accrediting agencies.

Curriculum approval at the local level plays a central role in ensuring that all students receive the same quality of instruction. More importantly, it is the fundamental mechanism that engages faculty in the design and evaluation of curriculum and its effectiveness in helping students

Requirements for local curriculum approval include:

- Local curriculum committee approval of all credit courses or sequences of courses constituting a program.

- The curriculum committee conducting the review has been established by mutual agreement between the college and/or district administration and the local Academic Senate. The committee is a committee of the local Academic Senate or a committee that includes primarily faculty.

- The curriculum committee shall recommend approval of the course only if the course:

  - covers the appropriate subject matter, and

  - uses resource materials, teaching methods and standards of attendance and achievement that the committee deems appropriate of the enrolled students.

- The COR shall specify the scope, objectives, content, instructional methodology, and methods of evaluation for determining whether the stated objectives have been met.

- The COR serves as the official record of the course description; is maintained in the official college files; and is made available to each instructor.

- The COR indicates approval by the curriculum committee and possibly other entities dependent upon local practice.

- All sections of the course are taught by a qualified instructor in accordance with the [Minimum Qualifications for Faculty and Administrators in California Community Colleges](#) and the set of objectives and other specifications defined in the COR.

- The district governing board has approved all courses.

Title 5, § 55002, establishes two credit course categories and standards for approval:

- Associate Degree-applicable Credit Courses

- Nondegree-applicable Credit Courses

Associate Degree-applicable Credit Courses

Title 5, § 55002(a) defines an associate degree-applicable course as a course that has been designated as appropriate to the associate degree in accordance with the requirements of Title 5, § 55062. Degree-applicable courses must meet the standards specified in Title 5, § 55002(a)(2) in the following categories for approval by the local and/or district curriculum committee and district governing board:

Grading Policy

Title 5, § 55002(a)(2)(A) requires that all degree-applicable courses must culminate in a recorded grade based on the standards outlined in Title 5, § 55023. Two key components of this section that must be addressed as part of local approval are that the COR bases grades on:

- Demonstrated proficiency in the subject matter, and

- The ability to demonstrate 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 demonstrated by students.

Units

Title 5, § 55002(a)(2)(B) specifies that the local process for approval of curriculum assures that the COR grants units of credit for courses based on a relationship between the number of units and the number of hours or other performance criteria.

Title 5, § 55002.5, provides specific direction on the standards for this calculation; however, this section sets forth the following principles:

- Units of credit are based on a relationship with hours that is specified by the district governing board.

- Each unit of credit represents a minimum of three hours of study, including class time, per week, over the length of the primary term used by the college.

- Hours per week are prorated for short term or extended term, laboratory, and activity courses as appropriate.

Standards for credit calculation are explained in detail later in this chapter.

Intensity

Title 5, § 55002(a)(2)(C) establishes the standard that degree-applicable credit courses must be designed with sufficient scope and rigor to require students to spend additional, independent study time beyond class hours. This standard interacts with Title 5, §§ 55002(b)(2)(B) and 55002.5, where the calculation of units is based on total student learning hours, inclusive of all hours spent inside and outside of the class. The COR should provide sufficient scope and rigor to account for outside-of-class hours. Grades must be based on demonstrated proficiency in the subject matter and the ability to demonstrate that proficiency, at least

in part, by means of written expression that may include essays, or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students.

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 (credit or noncredit) that are established, reviewed, and applied in accordance with the requirements of this article" (CCR, Title 5, § 55002(a)(2)(D)).

This section of regulation is primarily directed at the pre and corequisites other than communication or computation, which are covered in the next section. The total standards, criteria, and approval process for prerequisites and corequisites is covered in Title 5, § 55003 and further explained in subsequent sections of this Handbook.

Basic Skills Requirements

Title 5, § 55002(a)(2)(E) outlines the requirement of establishing a pre or corequisite of eligibility for entry into an associate degree level course in English or math when student success in the course is dependent on skills in communication or computation. Of note in this regulation is the following clause:

"If success in the course is dependent upon communication or computation skills, then the course shall require…"

Local curriculum approval must include an assessment of basic skills requirements and, where it is determined that students must be able to communicate or compute at college level, the establishment of pre or corequisites in English or mathematics. The establishment of requirements under this section must conform to the standards and criteria specified in Title 5, § 55003.

Difficulty and Level

Title 5, § 55002(b)(2)(F) and (G) require that degree-applicable courses include work requiring critical thinking and understanding and application of concepts at a college level. Additionally, the local approval process must ensure that each degree-applicable course includes learning skills and vocabulary that are at college level.

Nondegree-applicable Credit Courses

Nondegree-applicable courses as defined in Title 5 § 55002(b) are a type of stand-alone course that must provide instruction in critical thinking, prepare students to study independently outside-of-class, and include reading and writing assignments. However, the course materials and level of difficulty are not required to be at the college level. These courses must meet the approval standards specified in § 55002(b) in the following categories for approval by the local and/or district curriculum committee and district governing board:

Grading Policy

Title 5, § 55002(b)(2)(A), requires that course grading standards measure student performance against the course objectives and that grades are awarded in compliance with § 55023. Two key components of § 55002(b)(2)(A) that must be addressed as part of local approval, that the COR bases grades on are:

- Demonstrated proficiency in subject matter, and

- The ability to demonstrate proficiency, in part, through essays, problem solving exercises, or skills demonstrations, as deemed appropriate by the curriculum committee.

Units

Title 5, § 55002(b)(2)(B) specifies that the local process for approval of curriculum assures that the COR grants units of credit for courses based on a relationship between the number of units and the number of hours or other performance criteria. Title 5, § 55002.5 provides specific direction on the standards for this calculation; however, this section sets forth the following principles:

- Units of credit are based on a relationship with hours that is specified by the district governing board.

- Each unit of credit represents a minimum of three hours, including class time, per week.

- Hours per week are prorated for short term or extended term, laboratory, and activity courses as appropriate.

Standards for credit calculation are explained in detail in the "Credit Hour Calculation" section of this Handbook.

Intensity

Title 5, § 55002(b)(2)(C) establishes that the course must be designed with sufficient scope and rigor to require students to spend additional, independent study time beyond class hours. Likewise, the course must include writing and reading assignments and homework. This standard interacts with Title 5, §§ 55002(b)(2)(B) and 55002.5 where the calculation of units is based on total student learning hours, inclusive of all hours spent inside and outside of the class. The course must demonstrate scope and intensity that prepares students, either

through completion of this course or a required sequence of courses linked to this course, for degree-applicable work. Grades must be based on demonstrated proficiency in the subject matter and the ability to demonstrate that proficiency, at least in part, by means of written expression that may include essays, or, in courses where the curriculum committee deems them to be appropriate, by problem solving exercises or skills demonstrations by students.

Prerequisites and Corequisites

Title 5, § 55002(b)(2)(D) allows a college or district to require pre or corequisites for nondegree-applicable courses. This is different from the standards for degree-applicable courses that require pre or corequisites where applicable. Nondegree-applicable courses must follow the standards, criteria, and approval process for prerequisites and corequisites outlined in Title 5, § 55003.

Standards for Credit Hour Calculations

Credit hour calculations are governed by the standards in Title 5, §§ 55002(a)(2)(B), 55002(b)(2)(B) and 55002.5, which collectively provide the definitions and parameters for credit hour calculations for most courses. Title 5, §§ 55002(a)(2)(B)-(b)(2)(B) grant district governing boards the authority to specify the relationship between units of credit and hours of classroom instruction, state the minimum weekly hours for one unit of credit, and provide for prorating hours of in-class to outside-of-class work appropriate to term length and instructional format. The calculation of units of credit for cooperative work experience programs is established in Title 5, § 55256.5.

Standard Formula

The standard formula for credit hour calculations applies to the majority of courses and course types and is derived from Title 5, § 55002.5. Colleges are required to define one unit of credit as a minimum of 48 total hours of student work, inclusive of all contact hours plus outside-of-class, or homework, hours pursuant to Title 5, § 55002.5(a). This is based on the assumption of 3 hours of student work per week over a 16-week term, for 1 unit of credit. The Chancellor's Office recommends the use of 54 total hours of student work (18 weeks x 3 hours) for this calculation, rather than the minimum 48. As a result, all examples in this section use 54 hours as the basis for this calculation. In practice, local districts may use a number or a range between 48 and 54, depending on local practices, but must apply this number consistently in credit hour calculations. This number is referred to as the "hours-per-unit divisor" in the sections below. The total of all contact hours and outside-of-class hours, as described below, is referred to as "total student learning hours" and is the dividend in the credit calculation formula.

Courses not classified as cooperative work experience, clock hour, or open entry/open exit use the following method for calculating units of credit:

Divide total student learning hours by the hours-per-unit divisor, round down to the nearest increment of credit awarded by the college. Expressed as an equation:

$$\frac{\text{(Total Contact Hours + Outside-of-class Hours)}}{\text{Hours-per-unit Divisor}} = \text{Units of Credit}$$

The result of this calculation is then rounded down to the nearest .5 increment or to the nearest fractional unit award used by the district, if smaller than .5. This formula applies to both semester and quarter credit calculations. While this formula can yield a value below the lowest increment of credit awarded by the college, zero-unit courses are not permissible.

Definitions

The following definitions are used in the application of this formula:

Total Contact Hours: The total time per term that a student is under the direct supervision of an instructor or other qualified employee as defined in Title 5, §§ 58050, 58051 and 58161. This number is the sum of all contact hours for the course in all calculations categories, including lecture, recitation, discussion, seminar, laboratory, clinical, studio, practica, activity, to-be-arranged, etc. Contact hours for courses may include hours assigned to more than one instructional category, e.g., lecture and laboratory, lecture and activity, lecture and clinical.

Outside-of-class Hours: Hours students are expected to engage in course work outside of the classroom. Federal and state regulations for credit hour calculations are based on the total time a student spends on learning, including outside-of-class hours. As a matter of standard practice in higher education, lecture and related course formats require two hours of student work outsid¬e-of-class for every hour in-class. All other academic work, including laboratory, activity, studio, clinical, practica, To Be Arranged (TBA) etc., must provide an equivalent total number of student learning hours as typically required for lecture, with the ratio of in-class to outside-of-class work prorated appropriately for the instructional category.

Traditionally, these ratios are expressed as shown in the following table:

Table 5 — In-class to Out-of-class Hours Ratio

Instructional Category	In-Class Hours	Outside-of-Class Hours
Lecture (Lecture, Discussion, Seminar and Related Work)	1	2
Activity (Activity, Lab w/ Homework, Studio, and Similar)	2	1
Laboratory (Traditional Lab, Natural Science Lab, Clinical, and Similar)	3	0

Other categories or ratios for inside- to outside-of-class hours are possible, but should fall within the parameters for one unit of credit as described in the above. Standard expectations in higher education for credit hour calculations generally align with the in-class to outside-of-class ratios as described in this table. Deviations from these widely accepted standards, while permitted, can negatively affect course transferability and articulation; therefore, should be used with caution. Since TBA hours are required to be listed separately on the COR, any outside-of-class hours expected of students in relationship to TBA contact hours, must be included in the total student learning hours for the calculation.

Hours-per-unit Divisor: This is the value or value range used by the college to define the number of hours required to award each unit of credit. The value must be minimum of 48 and maximum of 54 hours for colleges on the semester system and a minimum of 33 and maximum of 36 for colleges on the quarter system. This number represents the total student learning hours for which the college awards one unit of credit. Colleges may use any divisor within this range, but should maintain consistency between the divisor and the dividend. For example, if a college uses the 51 = 1 unit calculation to determine the hours of lecture and outside-of-class work in the dividend, they should use 51 as the divisor. Colleges that indicate the minimum and maximum range of 48–54 should show that same range for the dividend in the equation and resulting unit calculation.

Term Length and Hours-per-unit Divisor: Colleges must exercise caution in determining the hours-per-unit divisor for credit hour calculations. California finance laws assume that primary terms average 17.5-weeks on the semester system and 11⅔-weeks on the quarter system (the two semesters or three quarters equal the traditional 35-week academic year), and because student attendance and related apportionment state compliance auditing is based on the student contact hours delineated in the official COR, the Chancellor's Office strongly recommends that colleges use the 18-week semester or 12-week quarter as the basis for the student contact hour calculation used in the COR, even if a college has been approved to use a compressed academic calendar. The 18-week semester or 12-week quarter primary term provides the greatest flexibility in terms of contact hours, and colleges do not risk an audit finding for excessive apportionment claims such as they might experience using a 16-week semester basis for the contact-hour calculation. It is also important to note the flexible calendar program is designed around the 35-week traditional academic calendar, so basing contact hour targets around an 18-week semester assures that instructional hours lost to "flex" activities will not result in the district not providing the minimum number of hours required by Title 5, § 55002.5 to award a unit of credit.

Calculation Categories and Outside-of-class Hours: As outlined in the sample table on page 58, colleges can use a variety of calculation categories to describe configurations and expectations for contact to outside-of-class hours. The traditional credit hour model for classroom instruction (lecture, discussion, recitation, etc.) assumes one hour in the classroom and two hours of outside work each week for the length of the primary term for one unit of credit. All other categories must provide at least as much time, with the in-class to outside-of-class hours reflecting standard practices and expectations for that academic activity. The sample table provides the three most common configurations and names for these categories, but practices and nomenclature may vary among institutions.

The activity or laboratory with homework category, described in the table as an expectation of two hours in the classroom and one hour of outside-of-class work, should be used with caution. In the natural sciences and other disciplines, it is standard practice to base the number of units awarded for laboratory solely on contact hours, even though there may be some expectation of student work or preparation outside-of-class. Any alteration of this relationship for laboratory courses in the natural sciences and clinical hours in many allied health fields can jeopardize programmatic accreditation and acceptability in meeting major or GE requirements when transferred to a baccalaureate degree-granting institution. Use of this category should be restricted to only those instructional areas where it is clearly aligned

with accepted practices in higher education. This category is commonly found in the visual and performing arts, physical education, CTE fields, and other disciplines. The term "activity" as used in this context is not intended to limit or define the use of this term locally. Some colleges use this term and related credit calculations interchangeably with laboratory.

The COR must include both in-class hours and outside-of-class hours.

While most courses fall into one of the calculation categories listed above, some courses use a combination of categories, such as lecture combined with lab, activity, TBA, studio, or clinical hours on a single COR. Guidance for alignment with standard practices in higher education and sample calculation tables for common course formats and combinations of calculation categories are contained in guidance from the Chancellor's Office.

Fractional Unit Awards and Minimum Thresholds

Title 5, § 55002.5(c) and (d) govern the awarding of fractional units of credit. Specifically, section (c) permits the college to award units of credit in a minimum of .5 increments; whereas section (d) permits colleges to award units in increments smaller than .5 if established by local policy.

Calculations for each increment of credit awarded by the college represent the minimum threshold for awarding that increment of credit. Students are awarded the next increment of credit only when they pass the next minimum threshold. For example, if a course is designed to require 180 total student learning hours (108 contact hours and 72 outside-of-class hours), the calculation of units works as follows:

$$180 / 54 = 3.33$$
3 units of credit

In this example, the college would not award 3.5 units until the total student learning hours reached the 189-hour minimum threshold for 3.5 units. However, if a college offers credit in .25 increments, this example would yield a 3.25-unit course. Another example is a course offered for 36 contact hours, with 4 hours of homework, resulting in 40 total student learning hours. In a district that awards credit in .5 increments, 40 total student learning hours divided by 54 is .75, which meets the minimum threshold for .5 units of credit, but does not pass the minimum threshold for 1 unit of credit. In this example, 40 total student learning hours (36 contact and 4 outside-of-class) would award .5 units of credit. This is similar to the award of grades where, for example, a student earns a "B" for any percentage between 80 and 89. The student is only awarded an "A" when they reach the minimum threshold of 90 percent.

Cooperative Work Experience Formula

Credit hour calculations for work experience are governed by the regulations set forth in Title 5, § 55256.5. In Title 5, § 55256.5(c)(1-2) the following requirements are specified:

- Each 75 hours of paid work equals one semester credit or 50 hours equals one quarter credit.

- Each 60 hours of non-paid work equals one semester credit or 40 hours equals one quarter credit.

Clock Hour Programs

The definition of a clock hour program and standards for awarding of units of credit for these programs is defined in 34 Code of Federal Regulations §§ 668.8(k)(2)(i)(A) and 668.8(l), respectively. In this regulation, a program is considered to be a clock-hour program for purposes of the Title IV, Higher Education Act (HEA) program if a program is required to measure student progress in clock hours when:

- Receiving Federal or State approval or licensure to offer the program; or

- Completing clock hours is a requirement for graduates to apply for licensure or the authorization to practice the occupation that the student is intending to pursue.

Programs that meet this definition are required to use a federal formula for determining the appropriate awarding of credit that is outlined in 34 Code of Federal Regulations § 668.8(l). Compliance with this credit hour calculation is a component of regional accreditation review; however, Title 5 regulations do not include specific guidance or methods for calculating credit in clock hour programs.

Local Policy

Annually, the College Chief Education Officer, Chief Instructional Officer, Academic Senate President, and Curriculum Chair sign an affidavit certifying that all curriculum was approved in accordance with Title 5 and Chancellor's Office requirements. The certification requires that districts have district governing board policy on awarding credit. This policy must specify the accepted relationship between contact hours, outside-of-class hours, and credit for calculating credit hours to ensure consistency in awarding units of credit. The creation of a standing policy or formal calculation document helps districts fulfill the responsibility for district governing boards under California Code of Regulations, Title 5, § 55002 to establish the relationship between units and hours for the local curriculum development and approval process.

Open Entry/Open Exit Course Credit Calculation

Courses approved by the curriculum committee as meeting the definitions in Title 5, § 58164, for open entry/open exit courses are required by Title 5, § 58164(b) to calculate one unit of credit as a minimum of 48 hours of total student work, regardless of the course format. This is not functionally different from the standard formula described previously, but it is contained in a separate section of Title 5. Fractional units are awarded in the same proportion.

Other Course Types and Standards

Standards for Conditions of Enrollment

Standards for establishing and monitoring Prerequisites, Corequisites, and Advisories on Recommended Preparation are outlined in Title 5, § 55003. This section of regulations includes: definitions; allowance for the establishment of conditions of enrollment (COE) on the basis of content review or content review with statistical validation; the requirement that all conditions of enrollment must be made on a course-by-course or program-by-program

basis; requirements for the development of local policy; directions for district governing boards to develop a plan for the establishment of conditions of enrollment by content review for English or mathematics; requirements for course availability; and other provisions.

COE are organized into three categories:

- **Prerequisite**
  Prerequisites are COE that students are required to meet prior to enrollment in particular courses and programs. The assignment of a prerequisite to a course signifies that the course skills, or body of knowledge described in the prerequisite, are essential to the success of the student in that course and that it is highly unlikely that a student who has not met the prerequisite will receive a satisfactory grade in the course for which the prerequisite has been established.

- **Corequisite**
  Corequisites are COE that signify that a body of knowledge or course skills are essential to the success of a student in a course. However, this body of knowledge or course skills can be acquired or developed concomitantly with the primary course. Therefore, a student is required to enroll in a corequisite simultaneously with (or, in some cases, may be allowed to enroll in the corequisite prior to) the primary course.

- **Advisory on Recommended Preparation**
  Advisories are COE that a student is advised, but not required to meet before or in conjunction with enrollment in a course or educational program.

Credit Course Repetition

The primary regulations for credit course repetition are contained in Title 5, §§ 55040–55046. The bulk of these sections deal with student repetition of credit courses, rather than the development and approval of curriculum. The Chancellor's Office published the Credit Repetition Guidelines in November of 2013, to provide guidance to local districts on establishing policies, processes, and curricula that are compliant with all regulations. Standards for the development of repeatable credit courses and other elements linked to curriculum development and approvals are contained in Title 5, §§ 55040 and 55041.

Repeatable Courses

Note: This is separate from students repeating a course due to receiving a substandard grade.

Title 5, § 55041 permits local districts to designate certain courses as repeatable, permitting up to four takes of a course so designated. The following types of courses may be designated repeatable:

Courses Required for CSU or UC Major Requirements

Title 5, § 55041(a)(1) permits a district to designate a course as repeatable when repetition is necessary to meet the major requirements of CSU or UC for completion of a bachelor's degree. The requirement for repetition must be verifiable to the district through the individual CSU or UC's catalog, degree or major requirements documents, or other official publication. An informal letter from the department or faculty member is not sufficient verification to designate a course as repeatable under this regulation as it is not binding on CSU or UC. This designation is limited to the lower division component of the major at the CSU or UC.

Intercollegiate Athletics Courses

Title 5, § 55041(a)(2) permits a district to designate intercollegiate athletics courses, as defined in Title 5, § 55000, as repeatable. The limit for repeatability in this instance is not a specific number of enrollments, as requirements for student athlete enrollment in these courses are governed by other sections of state regulations, which limit student athletes to 350 contact hours of intercollegiate athletics per year. However, districts may only claim apportionment for four enrollments, no matter the structure of the course established through the curriculum process or the manner in which the course is scheduled.

These types of courses are intended to be narrowly construed, meaning the course is either the one that the athlete must be enrolled in to participate in the sport that is sponsored by the district or the course that is devoted to conditioning the athlete to safely participate in the competitive sport. Typical sports theory courses, e.g., courses in which students watch a game film and discuss the film with coaches, are not conditioning courses that support the organized competitive sport and thus, are not courses that a district may properly designate as repeatable.

Intercollegiate Competition Courses

Title 5, § 55041(a)(3) permits a district to designate courses designed for intercollegiate academic or vocational competition as a repeatable. Intercollegiate academic or vocational competition courses are very narrowly defined as courses that meet all of the following criteria: 1) the course must be designed specifically for participation in non-athletic competitive events; 2) the competition must be between students from different colleges; 3) the competition must be sanctioned by a formal collegiate or industry governing body; and 4) the participation in the sanctioned competitive event between students from different colleges must be a course requirement and that requirement must be specified in the course content and objectives pursuant to Title 5, § 55002 subdivisions (a) or (b).

The Credit Repetition Guidelines provides greater detail and examples for all of these course types. Districts designating courses repeatable under the provisions of this section must comply with the requirements under Title 5, § 55041(b) requiring the identification of all repeatable courses and the designation of those courses in the catalog. The district and district curriculum committee may not designate any other courses as repeatable. All other components of credit course repetition are tied to the student, not the curriculum. However, in some instances, the curriculum development and approval process can be used to strengthen the ability of the student and the district to apply the other exceptions outlined in Title 5.

Standards for Distance Education

Distance Education (DE) is regulated by Title 5, Chapter 6, Subchapter 3, Article 1 starting with section 55200. DE is defined in Title 5, § 55200, as instruction in which the teacher and student are separated by distance and interact through communication technology. Both credit and noncredit courses may be offered through distance education.

Table 6 — Title 5, Sections on Distance Education

Title 5 Section Number	Topic
55200	Definition and Application
55202	Course Quality Standards
55204	Instructor Contact
55206	Separate Course Approval
55208	Faculty Selection and Workload
55210	Ongoing Responsibility of Districts

These regulations refer to all courses that are developed with the intent that individual classes or sections, or any portion of the course, may be scheduled as distance education instead of traditional, face-to-face instruction. This includes courses referred to as partially online, formerly referred to as "hybrid", that combine traditional, face-to-face instruction and DE with either synchronous or asynchronous instructor-student interaction through communication technology.

Title 5, §§ 55200-55204, specifies that course quality standards apply to distance education in the same manner as for regular classroom courses, and that each course delivered via distance education must be separately approved as such through local curriculum approval processes. In addition, the regulations require regular effective contact between instructors and students, and among students.

Title 5, § 55206 states that, **"If any portion of the instruction in a new or existing course is to be provided through distance education, an addendum to the official course outline of record shall be required."** An addendum is an item of additional material, typically omissions, that are added at the end of a document. If a college's COR includes the required information, then an addendum would not be needed.

Standards for Open Entry/Open Exit Courses

Open entry/open exit courses are defined in Title 5, § 58164 as credit or noncredit courses in which students enroll at different times and complete at various times or at varying paces within a defined time period, such as a semester or quarter.

When an open entry/open exit course provides supplemental learning assistance (pursuant to Cal. Code Reg., Title 5, § 58172) in support of another course or courses, the COR for the supplemental open entry/open exit course must identify the course or courses it supports, as well as the specific learning objectives the student is to pursue. Determination of student contact hours must be based on a maximum number of hours that the curriculum committee

considers reasonably necessary to achieve the learning objectives of the primary course or courses being supplemented. Thus, the supplemental COR must be prepared in light of the primary course objectives, but the hours for the supplemental COR will then be based on the objectives and related assignments specified in the supplemental COR.

Credit Open entry/open exit courses must be designed in such a way that most students who are appropriately placed in the course would be able to master the objectives and complete the course successfully in about 48–54 hours per unit of credit. Some students may need more hours to complete the course and may need greater assistance from faculty and staff; whereas other students may need fewer hours to do the same and need little or no assistance. Regardless of the number of hours the student needs to complete the course, the number of units earned will be the same and the number of hours needed by most students to complete the course as approved by the curriculum committee will be recorded in the COR.

Cooperative Work Experience Education

Cooperative Work Experience Education is authorized by Title 5, § 55250 et seq. Community college districts offering cooperative work experience must develop, submit, and receive district governing Board approval for their Cooperative Work Experience District Plan as specified in Title 5, § 55250, prior to offering these courses. This category of course is an exception to the usual requirement that state-reimbursed community college education be under the immediate supervision of a qualified academic employee. A college that offers Cooperative Work Experience must provide contractual services, including supervision by a qualified instructor or coordinator, written evaluation of students' progress, consultation with employers, specific objectives, and other elements. Units of work experience must be earned in patterns as described in Title 5, § 55256.5.

Table 7 — Title 5, Sections on Cooperative Work Experience Education

Title 5 Section Number	Topic
55250	Approved Plan Required
55250.2	Laws or Rules Applicable to Minor Students in Work Experience
55250.3	Work Experience Education
55250.4	Funds for Work Experience Programs for Students with Developmental Disabilities
55250.5	Work-Experience Education Involving Apprenticeable Occupations
55250.6	Work Experience Outside of District
55250.7	Wages and Workers' Compensation
55251	Requirements of Plan
55252	Types of Cooperative Work Experience Education
55253	College Credit and Repetition
55254	Student Qualifications

Title 5 Section Number	Topic
55255	District Services
55256	Records
55256.5	Work Experience Credit
55257	Job Learning Stations

Title 5, § 55252 establishes two types of Cooperative Work Experience Education. General Work Experience Education is supervised employment intended to assist students in acquiring desirable work habits, attitudes, and career awareness. The work experience does need not be related to the student's specific educational goals. Occupational Work Experience Education is supervised employment where on-the-job learning relates to the student's specific educational or occupational goal. Title 5, section 55253 states that a student may earn up to a maximum of 16 semester units or 24 quarter units of both types of work experience education combined. Title 5, section 55253, and related sections, allow for student repetition of Cooperative Work Experience courses; however, Title 5, § 55041 does not allow for these courses to be designated as "repeatable" for the purposes of curriculum development processes. Districts may permit students to re-enroll in these courses as many times as it takes to reach the maximum units as described above, within Title 5, § 55253 semester and quarter limitations.

When Cooperative Work Experience Education is reported in the Chancellor's Office Management Information Systems (MIS), the TOP Code 4932.00 must be used for General Work Experience Education. Occupational Work Experience must be reported in the same TOP Code as the program of which it is a part. For example, Occupational Work Experience in the area of automotive technology must be reported in TOP Code 0948.00.

Resources and information about Cooperative Work Experience Education can be found on the Chancellor's Office website (www.cccco.edu) under the Workforce and Economic Development Division page, under the CTE section. The Work-Based Learning Handbook is an online reference to topics and issues central to the effective implementation and operation of Cooperative Work Experience Education and work-based learning programs.

Independent Study Courses

The standards for Independent Study are set forth in Title 5, § 55230 et seq. Independent study is a mode of instruction in which students are not required to be under the immediate supervision and control of a qualified academic employee.

Table 8 — Title 5, Sections on Independent Study

Title 5 Section Number	Topic
55230	Purpose
55232	Academic Standards

Title 5 Section Number	Topic
55234	Student Progress
55236	Availability of Instructor
55238	Eligibility for State Funds
55240	Instruction

This should not be confused with the requirement in Title 5, § 55002 that all courses offered for credit must require students to study independently outside-of-class. Instead, independent study in this context refers to a course that is not regularly scheduled, but for which it is expected that the student will interact directly with the instructor on an individual basis. Title 5, § 55232 requires that independent study courses must maintain the same academic standards as applied to other credit or noncredit courses.

Educational Assistance Class Instruction (Approved Special Class)

Title 5, § 56028 establishes the definition and requirements for educational assistance classes as follows:

> *Educational assistance classes are instructional activities offered consistent with the provisions of Subchapter 1 of Chapter 7 of this Division, and designed to address the educational limitations of students with disabilities who are admitted to the institution pursuant Educational Code section 76000 et seq. and would be unable to substantially benefit from general college classes even with appropriate academic adjustments, auxiliary aids and services. Such classes generate revenue based on the number of full-time equivalent student (FTES) enrolled in the classes. Such classes shall be open to enrollment of students who do not have disabilities; however, to qualify as an educational assistance class, a majority of those enrolled in the class must be students with disabilities….*

Educational assistance classes may also refer, however, to distinct courses with their own CORs, designed either to meet educational objectives unique to a population with specific disabilities, or to supplement the standard objectives in an otherwise similar course with objectives unique to that population. In both cases, educational assistance classes must be primarily instructional in nature and must have objectives that fall within the instructional mission of the California Community Colleges. Such courses cannot be designed primarily to provide group activities or services (e.g., therapeutic activity, counseling, or assessment testing), but must instead provide systematic instruction in a body of content or skills whose mastery forms the basis of the student grade.

Title 5, § 56028 requires that classes designed to meet the needs of students with disabilities must be open to enrollment of students who do not have disabilities, but provides that in order to qualify as an educational assistance class, a majority of those enrolled must be students with disabilities. The course description published in the college catalog may note that it has been designed for students with specific disabilities, but the college may not restrict enrollment to such students, nor require students to register for classes through the

Disabled Student Program and Services (DSPS) program or counselor, nor otherwise violate the open-enrollment provisions of state law (CCR, Title 5, § 51006).

Title 5, § 56208 requires courses designed to meet the needs of students with specific disabilities to adhere to the academic standards for courses as specified in Title 5, § 55002, and meet the following requirements:

- Be designed to enable students with disabilities to compensate for educational limitations and/or acquire the skills necessary to complete their educational objectives;

- Employ instructors who meet minimum qualifications set forth in Title 5, § 53414;

- Utilize curriculum, instructional methods, or materials specifically designed to address the educational limitations of students with disabilities. Curriculum committees responsible for reviewing and/or recommending educational assistance class offerings shall have or obtain the expertise appropriate for determining whether the requirements of this section are satisfied; and

- Utilize student/instructor ratios determined to be appropriate by the District given the educational limitations of the students with disabilities enrolled in each class. Class size should not be so large as to impede measurable progress or to endanger the well-being and safety of students or staff.

Title 5, § 56029 allows extended repetitions of DSPS courses under certain circumstances that are discussed in the Credit Course Repetition chapter of this Handbook.

The COR for a course developed in compliance with Title 5, § 56028, should:

- Specify the disability or disabilities the course is designed to address;

- Describe the objectives the course is to fulfill as they relate to these disabilities;

- Describe why a special course is needed to meet this need, rather than being met through accommodation in a regular course;

- Specify how it will be determined that the objectives have been achieved; and

- Explain what disability-specific instructional methods, materials, equipment, etc., will be used and why.

Course sections that are merely adapted to enable students with disabilities to meet the regular course objectives in an alternative way do not require additional Chancellor's Office review.

Apprenticeships

Apprenticeships are regulated in multiple sections of state regulations and codes, including Title 5, § 55250.5 and Labor Code §§ 3070-3098. These regulations define an apprenticeship as preparation for any profession, trade, or craft that can be learned through a combination

of supervised on-the-job training and off-the-job formal education. The [California Division of Apprenticeship Standards](#) (DAS) within the California Department of Industrial Relations and the Chancellor's Office of the California Community Colleges share responsibility for the approval of credit and noncredit apprenticeship programs. This shared responsibility has created a partnership for developing apprenticeship programs that includes the community college and the employer, also known as the program sponsor.

The DAS approves matters dealing with on-the-job instruction and maintains the standards. Both the California Apprenticeship Law and the annual California Budget Act refer to the off-the-job formal education as related and supplemental instruction (RSI). Providing RSI is the job of the community colleges, adult schools, and regional occupational program centers. In addition, Labor Code section 3074 states that apprenticeship RSI shall be the responsibility of and be provided by state and local boards in charge of CTE in partnership with the program sponsor, who is normally the employer. The program or courses must have the approval by the Chancellor for both curriculum and RSI funding.

Required documentation must be signed by the Chief of the DAS (or designee) to indicate that the apprenticeship has been approved, including the specific campus approved for the RSI, apprenticeship title, file number, and sponsor contact information. Justification of the need for any new CTE programs, including apprenticeships, is specifically required through a job market study (LMI), pursuant to Education Code section 78015.

The Chancellor's Office has delegated authority to the Apprenticeship Program Coordinator, who provides support to the college and the program sponsor throughout the development and implementation of an apprenticeship program. The Vice Chancellor of Educational Services (or designee) reviews the programs and courses offered by the community college using criteria that represent the standards of good practice established in the field of curriculum design.

Apprenticeship proposals require additional supporting documentation including a [California Division of Apprenticeship Standards](#) (DAS) Approval Letter.

Contract Education

Contract curriculum is one of several educational options authorized by Education Code (Ed. Code § 78020(a)) to be offered within the California Community Colleges. Contract Education is legally defined as "those situations in which a community college district contracts with a public or private entity for the purposes of providing instruction or services or both by the community college."

Table 9 — Mandates and Regulations Related to Course Standards and Approval

Authority	Topic
Ed. Code § 76300(e)(3)	Contract Education Student Fee Requirement
Ed. Code § 78020(a)	Contract Education Definition
Ed. Code § 78021(a)	Establishing Contract Education
Ed. Code § 78021(c)	Contract Education Attendance Requirements

Authority	Topic
Ed. Code § 780222(a)	Contract Education Faculty Requirements
Ed. Code § 78022(b)	Contract Education for Credit and Noncredit Faculty Compensation
Ed. Code § 78022(d)	Contract Education Not-for-Credit Faculty Compensation
Ed. Code § 78023	Nonprofit Public Benefit Corporations
Ed. Code § 78020(a)	Contract Education Definition
Title 5, § 55170	Contract Courses

Community colleges are authorized to conduct contract education offerings to meet the specific training needs of private corporations or other public agencies. This authorization is contained in Education Code § 78021.

Most contract education offerings do not generate state apportionment, because they are customized offerings paid for by business for their employees. However, contract education courses that are open to any student of the college and meet all other legal requirements may generate apportionment. Approval of contract education classes is covered in Title 5, § 55170.

Title 5, § 55170 Contract Courses

(a) Any course approved pursuant to section 55002 may be offered by a college through contract education pursuant to Education Code section 78021. Approval of such a contract course may be required by other state agencies, but approval by the Chancellor is not required unless the course is part of a credit educational program subject to approval pursuant to section 55130 or is a noncredit course subject to approval pursuant to article 2 of this subchapter.

(b) The approval of the Chancellor is not required for any contract except for vocational education contracts pursuant to subchapter 7.

SECTION 3: CREDIT PROGRAMS CRITERIA AND STANDARDS

- **Overview of Credit Programs**
  This section provides an overview of the standards for all credit programs and is organized as follows:

  - Program Types

  - General Associate Degree Standards

  - Standards for Writing and Computation Competency

- **Associate Degree for Transfer Degrees: AA-T and AS-T**
  This section provides an overview of the standards for all credit programs and is organized as follows:

  - Degree Standards

  - Criteria for Approval

  - Double Counting Procedures for General Education

- **Career Technical Education Degrees: AA and AS**
  This section provides an overview of the standards for all Career Technical Education Degrees (AA and AS) and is organized as follows:

  - Degree Standards

  - Criteria for Approval

- **Local Associate Degrees: AA and AS**
  This section provides an overview of the standards for Local Degrees (AA and AS) and is organized as follows:

  - Degree Standards

  - Criteria for Approval

- **Certificates of Achievement**
  This section provides an overview of the standards for Local Degrees (AA and AS) and is organized as follows:

  - Standards and Definition

  - Criteria for Approval

- **Collaborative Programs**

- **Labor Market Information and Analysis**

Overview of Credit Programs

An educational program is defined in Title 5, § 55000(m) as "an organized sequence of courses leading to a defined objective, a degree, a certificate, a diploma, a license, or transfer to another institution of higher education." All associate degrees and certificates of achievement that appear by name on a student transcript or diploma must be chaptered by the Chancellor's Office, whether they are intended primarily for employment preparation (CTE), transfer (ADT), transfer preparation, as a record of academic achievement, or to fulfill other community needs.

The types of credit educational programs that must be submitted to the Chancellor's Office for chaptering include: Associate Degrees – local AA or AS and AA-T/AS-T, and Certificates of Achievement.

Program Types

All associate degrees in the California Community College system are classified in four general categories:

- Associate Degrees for Transfer (ADT) that meet all requirements of SB 1440 and Education Code § 66746:

  - Associate in Arts for Transfer (AA-T)

  - Associate in Science for Transfer (AS-T)

- Local Degrees:

  - Associate of Arts (AA)

  - Associate of Science (AS)

Certificates of Achievement, defined in Title 5, § 55070 are the only credit certificates that may appear by name on a student transcript, diploma, or completion award. Colleges **must** submit programs of 16 or more semester units or 24 or more quarter units of degree-applicable coursework to be chaptered by the Chancellor's Office. Colleges **may** submit programs of 8 or more semester units or 12 or more quarter units of degree-applicable coursework to be chaptered by the Chancellor's office in order that the program may be included in the student transcript.

Additionally, all programs submitted for Chancellor's Office review are required to state the primary goal of the program. This program goal is used to determine the standards and documentation for approval, but is not a component of state data tracking or reports and is not included for MIS data submissions. The three program goals are:

- Transfer: All ADTs and Certificates of Achievement for CSU GE-Breadth or IGETC.

- Career Technical Education (CTE): Limited to programs in a CTE TOP Code. May include both CTE and transfer goals (not including ADTs).

- Local: All other AA and AS degrees and Certificates of Achievement, not in a CTE TOP

Code, that are developed to meet locally defined needs consistent with the system mission, including transfer preparation. These degrees must align with a TOP Code.

Degrees submitted with a program goal of "CTE" or "Local" may include transfer preparation as a component or as the primary intent of the program. Standards and further explanations of these categories and associated approval criteria are discussed in detail in this chapter.

The Chancellor's Office supports ASCCC Resolution 9.06, approved in Spring 2008, which provided guidelines for classifying disciplines into AA or AS degrees as follows:

- Associate of Science (AS) is strongly recommended for any Science, Technology, Engineering, or Mathematics (STEM) field and CTE programs

- Associate of Arts (AA) is strongly recommended for all other disciplines

- Associate in Science for Transfer (AS-T) must be used for any Science, Technology, Engineering, or Mathematics (STEM) field and CTE programs

- Associate in Arts for Transfer (AA-T) must be used for all other disciplines

General Associate Degree Standards

The general standards for the Associate degree are set forth in Title 5, § 55063 which specifies the following requirements:

- At least 18 semester units or 27 quarter units in a major or in an area of emphasis

- At least 18 semester units or 27 quarter units of GE

- At least 60 total semester units or 90 quarter units

The 18 semester units or 27 quarter units in the major can be in a single discipline or related disciplines, as listed in the community colleges "Taxonomy of Programs", or it can be in an area of emphasis, defined as a more general grouping of lower division course work that prepares students for a field of study or specific major at a CSU or UC. The standards for GE are further defined in Title 5, § 55061. The remaining units may be used for local graduation requirements or electives, as permitted for the degree type.

Standards for Written Expression, Mathematics, and Reading Competency

All students awarded a degree must demonstrate competence in writing by obtaining a satisfactory grade in an English course at the level of Freshman Composition or by demonstrating competency that is comparable to satisfactory completion of the specified English course. Satisfactory completion of an English course at the level of Freshman Composition or higher satisfies both this competency requirement and the English Composition GE coursework requirement.

Competence in mathematics must be demonstrated by obtaining a satisfactory grade in a mathematics course at or above the level of the course typically known as Intermediate Algebra (either Intermediate Algebra or another mathematics course at or above the same

level, with the same rigor and with Elementary Algebra as a prerequisite, approved locally) or by demonstrating competency that is comparable to satisfactory completion of the specified mathematics course. Satisfactory completion of a mathematics course at the level of Intermediate Algebra or higher satisfies both this competency requirement and the Communication and Analytical Thinking GE coursework requirement.

It should be noted that the competency requirements for written expression and mathematics may also be met by obtaining a satisfactory grade in courses in English and mathematics taught in or on behalf of other departments and disciplines, and which, as determined by the district governing board, require entrance skills at a level equivalent to those necessary for Freshman Composition and Intermediate Algebra respectively.

Requirements for demonstrating competency in reading shall be locally determined.

For the purpose of this section, "satisfactorily completed" means either credit earned on a "pass-no pass" basis or a grade point average of 2.0 or better in community college credit courses in the curriculum upon which the degree is based.

Associate Degree for Transfer Degrees: AA-T and AS-T

Associate Degrees for Transfer (ADT) were developed in response to Senate Bill 1440 (Padilla, 2010) and subsequent revisions to Education Code § 66746(a) that required community colleges to develop and offer "associate degrees for transfer" which fulfill the lower division component of a baccalaureate major at a California State University. These degrees allow students to fulfill lower division major requirements at a community college and guarantee transfer with junior status to the CSU system. Students who complete an ADT and transfer to a similar major at a CSU are guaranteed a pathway to finish their baccalaureate degrees in 60 semester or 90 quarter units. These degrees require students to meet both of the following requirements:

> *(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:*
>
> *(A) The Intersegmental GE Transfer Curriculum (IGETC) or the California State University GE-Breadth Requirements (CSU GE-Breadth).*
>
> *(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.*
>
> *(2) Obtainment of a minimum grade point average of 2.0.*

ADTs include both Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T) degrees. The law authorizing these degrees also requires that students must earn a "C" or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is also an acceptable grade for courses in the major if the course is taken on a Pass/No Pass basis. Education Code § 66746(b) prohibits a community college district from imposing any additional course requirements for a student to be eligible for the associate degree for transfer, and subdivision (e) prohibits allowing remedial non-collegiate level coursework to be counted toward the units required for the associate degree for transfer (AA-T or AS-T). Title 5, § 55002(b) describes such courses as "nondegree-applicable credit courses."

The designators for the Associate in Arts for Transfer (AA-T) and the Associate in Science for Transfer (AS-T) degrees have been established by the ASCCC and are reserved only for associate degrees that meet all requirements of SB 1440 and Education Code § 66746. The term "transfer degree" is likewise restricted to ADTs.

Degree Standards

The following standards apply to the development and approval of the Associate Degree for Transfer:

- 60 semester units or 90 quarter units,

- Minimum 18 semester or 27 quarter units in major or area of emphasis,

- Must use CSU GE-Breadth or IGETC,

- May include transferable electives to reach 60 semester units or 90 quarter units,

- No local graduation requirements not specified or permitted in the statute,

- Must align with structure of TMC, and

- Constituent courses must have either C-ID or articulation/transfer status with CSU as specified on the TMC and the Chancellor's Office Template.

Minimum Units

The minimum number of units for the ADT is 60 semester or 90 quarter units that are CSU transferable. Students awarded this degree must complete at least 12 semester or 18 quarter units in residence.

Major or Area of Emphasis: Transfer Model Curriculum

An inter-segmentally developed Transfer Model Curriculum (TMC) defines the major or area of emphasis for all ADT degrees. In the implementation process for SB 1440 and Education Code § 66746 the ASCCC, in collaboration with the Academic Senate of the California State University, has developed a Transfer Model Curriculum (TMC) for certain majors that have been identified for students who transfer from a California community college to CSU. According to Title 5, § 55063 and Education Code § 66746 the associate degree must include a major or area of emphasis consisting of a minimum of 18 semester or 27 quarter units.

TMCs were developed as a means of facilitating a statewide response to the mandate that all community colleges offer "associate degrees for transfer." Draft TMCs are developed by intersegmental faculty (California community colleges and CSU, primarily) in the discipline and then made available for vetting at C-ID (www.c-id.net). Once a template for a TMC is finalized, community college faculty may then develop degrees that align with the TMC. The designators for these aligned TMC degrees are Associate in Arts for Transfer (AA-T) and Associate in Science for Transfer (AS-T).

When an associate degree for transfer is approved by the California Community Colleges

Chancellor's Office, the California State University Chancellor's Office will be notified so that the approved associate degree may be included in the CSU Mentor transfer application and in other publications. This data is used to identify eligible students who apply to the CSU for admission as described in Education Code § 66747.

Education Code § 66746 requires that community colleges create an ADT when they offer a degree in the same discipline (i.e., under the same TOP Code) as an existing transfer model curriculum (TMC) within 18 months of the approval of the TMC.

A TMC is considered to have final approval when the template is posted by the Chancellor's Office. The approved templates are located on the Chancellor's Office Educational Services and Support Division webpage under Templates for Transfer Model Curriculum.

Furthermore, similar agreements between UC and the California community colleges that depend on an approved transfer pathway template for development and approval of the degree shall be submitted using the same program goal and process as ADTs.

General Education

Education Code § 66746(a)(1)(A) requires that students complete the Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education–Breadth (CSU GE-Breadth) Requirements. Additional GE requirements are not permitted. Courses used to meet the major requirement may also be used to meet the GE requirement if those courses have been approved for IGETC or CSU GE-Breadth.

Most ADTs require full completion of IGETC or CSU GE-Breadth. However, certain ADTs are instead based on the completion of IGETC for STEM or CSU GE-Breadth for STEM. The IGETC for STEM and CSU GE-Breadth for STEM options permit students to follow the IGETC or CSU GE-Breadth curriculum but delay one Arts or Humanities course and one Social or Behavioral Science course until after transfer.

Electives

ADTs may include additional transferable electives, if necessary, to bring the total degree-applicable units to 60 semester units or 90 quarter units.

Prohibited Practices

Education Code § 66746(b) states "community college district shall not impose any requirements in addition to the requirements of this section, including any local college or district requirements …." Local college or district requirements that are prohibited include additional graduation requirements, such as additional GE requirements or a residency requirement that exceeds the minimum set by Title 5.

While the current program submission and approval process requires colleges to design ADTs that do not exceed 60 semester or 90 quarter units, a community college may confer the ADT to students who exceed the minimum units required for the degree

Criteria for Approval

ADTs must meet the following criteria for approval:

- Submission includes all required documentation:

  - Program Narrative,

  - Completed Chancellor's Office Template,

  - C-ID or ASSIST Articulation Information, as required by the TMC, and

  - COR for all courses included in major or area of emphasis.

- Degree meets all standards as listed above. Verification of meeting these standards is conducted through review of required documentation.

- Degree is submitted with program goal of "Transfer."

Program Narrative

Only the Program Goals and Objectives and Catalog Description items are required for the Narrative. The catalog description must reflect the following:

- Completion of 60 semester units or 90 quarter units of degree-applicable courses,

- Minimum overall grade point average of 2.0,

- Minimum grade of "C" (or "P") for each course in the major, and

- Completion of IGETC and/or CSU GE-Breadth.

Submission of a COR is required for each course specified in the major. All ADT degrees are submitted with "Transfer" as the program goal.

Chancellor's Office Templates for Approved Transfer Model Curriculum

The Chancellor's Office develops a template for each approved TMC. The templates are located on the Chancellor's Office Educational Services and Support Division webpage under Templates for Approved Transfer Model Curriculum. All submissions must include a completed, current template.

Course Identification Numbering System or ASSIST Articulation Documentation

The template specifies all of the courses that may be included in the ADT and the documentation required for each course when the degree is submitted for approval. Typically, all required core courses are identified by a Course Identification Numbering System (C-ID) descriptor, which sets the minimum standards for what should be included the COR. When a C-ID descriptor is listed on the template, C-ID articulation is required for the course(s) to be included in that section of the template. Additional information on C-ID descriptors and C-ID articulation is located on C-ID (www.c-id.net). However, courses pending C-ID approval over 45 days may be included in the degree if the program application demonstrates evidence

that those courses have been submitted to and are under review in the C-ID System. Thus, for evidence, please submit a screenshot from the C-ID website that includes the date of submission, course name, and college.

Courses on the template that do not need an approved C-ID descriptor require different documentation to justify the inclusion of the course. These include:

- **Articulation Agreement by Major** (AAM) demonstrating lower division preparation at one CSU campus,

- **CSU Baccalaureate Level Course List by Department** (BCT) showing the courses are CSU transferable, and

- **CSU GE-Breadth Certification Course List by Area** (GECC) identifying the transfer GE area(s) for which the course was approved.

Documentation for the above can be located on the articulation website ASSIST (www.assist.org) for inclusion in the application.

Double Counting Procedures for General Education

The TMC template also requires the IGETC and CSU GE-Breadth status of each course and how the units may be double counted, i.e., how the units can be used to fulfill both major preparation and transfer GE requirements. The general guidelines for double counting are:

The maximum number of "double counted" units is limited to the number of units assigned to each GE Area.

Example: A college's Calculus course is 5 units. The maximum number of units allowed for CSU GE-B Area B4 and IGETC Area 2 is 3 units. Thus, only 3 of the 5 units of the calculus course can be double counted for the CSU GE Area B4 or IGETC Area 2.

Courses can only be double counted in one GE Area.

Example: The Early Childhood Education Transfer Model Curriculum (TMC) identifies C-ID CDEV100 as applicable to CSU GE Area D and Area E. However, the "double counted" units can only apply to either CSU GE Area D or E, but not both. (The course maximum for either CSU-GE Area D or E is 3.)

Career Technical Education Degrees: AA and AS

The standards for all associate degrees are set forth in Title 5, § 55063. These include demonstrated competence in reading, in written expression, and in mathematics, and satisfactory completion of at least 60 semester units or 90 quarter units of degree-applicable credit course work in a major or area of emphasis, GE, and elective courses as needed to meet the minimum unit requirement. Associate degrees are classified as Career Technical Education (CTE) when they are in a TOP Code designated as vocational in the TOP Manual. CTE degrees may include transfer preparation as a component or as the primary intent of the program.

Degree Standards

Associate degrees classified as CTE must meet the following standards applicable to the development and approval of all AA and AS degrees submitted in this category:

- Minimum of 60 semester units or 90 quarter units;

- Minimum 18 semester units or 27 quarter units in major or area of emphasis as described in title 5, section 55063(a);

- Any GE pattern allowed by regulations, as determined by the college;

- Must include local graduation requirements;

- Must be offered in a vocational TOP Code;

- Recommendation by appropriate Regional Consortium

- May be designed for both CTE and transfer preparation.

Minimum Units

Title 5, § 55063 requires that students earning the associate degree complete at least 60 semester units or 90 quarter units of degree-applicable credit course work. These units must include at least 18 semester units or 27 quarter units in GE and at least 18 semester units or 27 quarter units in a major or area of emphasis. Of the total required units, at least 12 semester units or 18 quarter units must be completed in residence at the college granting the degree. Exceptions to residence requirements for the associate degree may be made by the district governing board when it determines that an injustice or undue hardship would be placed on the student.

Major or Area of Emphasis

Title 5, § 55063(a) was modified to allow colleges to develop associate degrees requiring 18 or more semester (27 or more quarter) units in a major or "area of emphasis." A major may be defined by the lower-division requirements of a specific major at the UC or CSU or a minimum of 18 semester (27 quarter) units in a field or in related fields selected by the community college. The requirements for a major must consist of courses that all students are expected to complete for a specific number of units. A small number of the required units may be completed by selecting courses from a list of restricted electives.

An area of emphasis is considered to be a broader group of courses and may be defined as 18 or more semester (27 or more quarter) units in related fields intended to prepare the student for a single major or related majors at a baccalaureate institution or to prepare a student for a particular field as defined by the community college. Such a degree may be similar to patterns of learning that a student undertakes in the first two years of attendance at a baccalaureate institution in order to prepare for a major, area of emphasis, or field of study. The requirements for an area of emphasis must specify the number of units that students will select from a list of courses that prepare students for a specific academic or professional goal. Each area of emphasis will be awarded as a separate degree and assigned a separate program control number.

If the CTE degree is designed to provide specific transfer preparation in addition to career preparation, the proposal must demonstrate through the narrative and required documentation that required courses in the program substantially satisfy the lower division coursework requirements for the corresponding baccalaureate major or concentration. The submission must show a good-faith effort on the part of the college to assure that, to the extent possible:

- Courses will count not only for transfer elective credit, but specifically toward completion of a major after transfer;

- Courses required in the lower division will not have to be repeated in the upper division; and

- All major requirements usually fulfilled in the lower division can be fulfilled at the community college.

General Education

For all associate degrees, it is important to maintain the philosophy that the associate degree represents more than an accumulation of units. Instead, it embodies completion of a well-defined pattern of learning experiences that are designed to develop certain capabilities. Title 5, § 55061 describes the completion of GE, one component of the degree, as a learning experience that demonstrates:

> …the ability to think and to communicate clearly and effectively both orally and in writing; to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capacity for self-understanding.

Title 5, § 55063(b) requires that students receiving an associate degree shall complete a minimum of 18 semester or 27 quarter units of GE coursework that includes a minimum of 3 semester or 4 quarter units in each of the following areas:

- Natural Sciences

- Social and Behavioral Sciences

- Humanities

- Language and Rationality

  - English Composition

  - Communication and Analytical Thinking

Ethnic Studies must be offered in at least one of the four areas listed above. While a course might satisfy more than one GE requirement, it may not be counted more than once for these purposes. A course may be used to satisfy both a GE requirement and a major or area of emphasis requirement.

All students awarded a degree must demonstrate competence in writing by obtaining a satisfactory grade in an English course at the level Freshman Composition or by achieving a score on an assessment comparable to satisfactory completion of the specified English course. Satisfactory completion of an English course at the level of Freshman Composition or higher satisfies both this competency requirement and the English Composition GE coursework requirement.

Competence in mathematics must be demonstrated by obtaining a satisfactory grade in a mathematics course at or above the level of the course typically known as Intermediate Algebra (either Intermediate Algebra or another mathematics course at the same level, with the same rigor and with Elementary Algebra as a prerequisite, approved locally) or by demonstrating competency that is comparable to satisfactory completion of the specified mathematics course. Satisfactory completion of a mathematics course at the level of Intermediate Algebra or higher satisfies both this competency requirement and the Communication and Analytical Thinking GE coursework requirement.

It should be noted that the competency requirements for written expression and mathematics may also be met by obtaining a satisfactory grade in courses in English and mathematics taught in or on behalf of other departments and disciplines, and which, as determined by the district governing board, require entrance skills at a level equivalent to those necessary for Freshman Composition and Intermediate Algebra respectively.

Requirements for demonstrating competency in reading shall be locally determined.

For the purpose of this section, "satisfactorily completed" means either credit earned on a "pass-no pass" basis or a grade point average of 2.0 or better in community college credit courses in the curriculum upon which the degree is based.

GE transfer patterns do not satisfy the requirement for a major or an area of emphasis. In other words, an associate degree cannot consist solely of CSU–GE-Breadth, IGETC, or the local GE pattern with the remaining units (to reach 60 semester or 90 quarter) in other GE courses or electives, selected at the student's discretion.

When an associate degree is developed for students who do not intend to transfer, a local GE pattern of a minimum of 18 semester or 27 quarter units may be required. When colleges offer degrees that include transfer preparation with a choice of local or transfer GE, colleges should strongly recommend or require that a student select the appropriate GE pattern for the student's intended goal with advice from a counselor. This may include CSU GE-Breadth, IGETC pattern, GE pattern for a four-year institution in an adjacent state, or the local GE pattern. There may also be additional graduation requirements at individual colleges, such as physical education. Some students who intend to transfer will complete more than 60 semester or 90 quarter units in order to meet all requirements for the associate degree.

Electives and Local Graduation Requirements

Associate degrees may include additional graduation requirements or electives, if necessary, to bring the total degree-applicable units to a minimum of 60 semester units or 90 quarter units.

Criteria for Approval

CTE associate degrees must meet the following criteria for approval:

- Submission must include all required documentation, including:

  - Narrative

  - CORs for all courses included in major or area of emphasis

  - Labor Market Information (LMI)

  - Advisory Committee Recommendation

  - Regional Consortium Recommendation

  - Appropriate transfer preparation documentation from the list of allowable documents if the program is designed for both CTE and transfer preparation

- Degree is submitted with program goal of "Career Technical Education"

Program Narrative

All new CTE associate degree proposals must include a narrative. All sections noted below must be submitted to the District Governing Board for approval, submitted to the Chancellor's Office curriculum inventory system, and maintained by colleges.

- Program Goals and Objectives – must address a valid workforce preparation purpose and may address transfer preparation

- Catalog Description – includes program requirements, prerequisite skills or enrollment limitations, student learning outcomes, and information relevant to program goal

- Program Requirements – includes course requirements and sequencing that reflect program goals. The GE pattern and the calculations used to reach the degree total must be shown following the program requirements table.

- Master Planning – how it fits in the mission, curriculum, and master planning of the college and higher education in California

- Enrollment and Completer Projections – projection of number of students to earn degree annually

- Place of Program in Curriculum/Similar Programs – how it fits in college's existing program inventory

- Similar Programs at Other Colleges in Service Area – justification of need for program in the region

- Transfer preparation information – if transfer preparation is a component of the program

Required Documentation

In addition to a narrative, all new and modified CTE programs must include:

- Current Labor Market Information and Analysis – see Section VII for a discussion on LMI analysis and considerations

- Advisory Committee Recommendation – includes advisory committee membership, minutes and summary of recommendations

- Regional Consortia meeting minutes showing program recommendation (only for new programs)

Apprenticeship Programs

Apprenticeship programs do not require advisory committee and regional consortia minutes, but do require labor market information and analysis, and an approval letter from the [California Division of Apprenticeship Standards](#) (DAS).

If a CTE program is designed to provide transfer preparation, as a component of or as the primary intent of the degree, then it must include at least one of the following documents to substantiate the alignment of the degree with transfer preparation standards. Appropriate documentation may include, but is not limited to, any of the following that sufficiently demonstrate this requirement:

- Programmatic articulation agreements

- ASSIST documentation verifying that a majority (51% or greater) of required courses in the program are articulated for the major (AAM) at the single baccalaureate institutions to which the program's students may be likely to transfer

- Table of major requirements from the most recent catalogs, with catalog dates and page numbers cited, for targeted transfer institutions showing crosswalk with California Community Colleges program requirements

- Summary of lower division major preparation published or endorsed by relevant professional bodies or programmatic accreditors, with citations included

- Formal letters from the intended receiving institution that verify alignment of proposed program with their program curriculum

Local Degrees: Associate Degree of Art and Associate Degree of Science

The standards for all associate degrees are set forth in Title 5, § 55063. These include demonstrated competence in reading, in written expression, and in mathematics, and satisfactory completion of at least 60 semester units or 90 quarter units of degree-applicable credit course work in a major or area of emphasis, GE, and elective courses, if needed to meet the minimum unit requirement. All associate degrees with the exception of ADTs and CTE degrees are considered "local" for the purposes of submission to the Chancellor's Office. However, this designation may include degrees intended to prepare students for transfer

to a particular baccalaureate program or major. The "local" designation is limited to the submission and approval process and has no bearing on how these degrees are tracked for other purposes.

Degree Standards

Associate degrees classified as "Local" must meet the following standards:

- Minimum of 60 semester units or 90 quarter units

- Minimum 18 semester units or 27 quarter units in major or area of emphasis as described in title 5, section 55063(a)

- Any GE pattern allowed by regulations, as determined by the college

- Include local graduation requirements

- Offered in a non-vocational TOP Code

- Designed to serve either transfer preparation and/or community needs

Minimum Units

Title 5, § 55063 requires that students earning the associate degree complete at least 60 semester units or 90 quarter units of degree-applicable credit course work. These units must include at least 18 semester units or 27 quarter units in GE and at least 18 semester units or 27 quarter units in a major or area of emphasis. Of the total required units, at least 12 semester units or 18 quarter units must be completed in residence at the college granting the degree. Exceptions to the residence requirements for the associate degree may be made by the district governing board when it determines that an injustice or undue hardship would be placed on the student.

Major or Area of Emphasis

Title 5, § 55063(a) was modified to allow colleges to develop associate degrees requiring 18 or more semester (27 or more quarter) units in a major or "area of emphasis." A major may be defined by the lower-division requirements of a specific major at the UC or CSU or a minimum of 18 semester (27 quarter) units in a field or in related fields selected by the community college. The requirements for a major must consist of courses that all students are expected to complete for a specific number of units. A small number of the required units may be completed by selecting courses from a list of restricted electives.

An area of emphasis is considered to be a broader group of courses and may be defined as 18 or more semester (27 or more quarter) units in related fields intended to prepare the student for a single major or related majors at a baccalaureate institution or to prepare a student for a particular field as defined by the community college. Such a degree may be similar to patterns of learning that a student undertakes in the first two years of attendance at a baccalaureate institution in order to prepare for a major/area field of study. The requirements for an area of emphasis must specify the number of units that students will select from a list of courses that prepare students for a specific academic or professional goal. Each area of emphasis will be awarded as a separate degree and assigned a separate program control number.

If a local associate degree is designed to provide transfer preparation, the proposal must demonstrate through the narrative and required documentation that required courses in the program substantially satisfy the lower division coursework requirements for the corresponding baccalaureate major or concentration.

The submission must show a good-faith effort on the part of the college to assure that, to the extent possible,

- Courses will count not only for transfer elective credit, but, specifically, toward completion of a major after transfer;

- Courses required in the lower division will not have to be repeated in the upper division; and

- All major requirements, usually fulfilled in the lower division, can be fulfilled at the community college.

General Education

For all associate degrees, it is important to maintain the philosophy that the associate degree represents more than an accumulation of units. Instead, it embodies completion of a well-defined pattern of learning experiences that are designed to develop certain capabilities. Title 5, § 55061, describes the completion of GE, one component of the degree, as a learning experience that demonstrates

> …the ability to think and to communicate clearly and effectively both orally and in writing; to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capacity for self-understanding.

Title 5, § 55063(b) requires that students receiving an associate degree shall complete a minimum of 18 semester units or 27 quarter units of GE coursework that includes a minimum of three semester or four quarter units in each of the following areas:

- Natural Sciences

- Social and Behavioral Sciences

- Humanities

- Language and Rationality

  - English Composition

  - Communication and Analytical Thinking

Ethnic Studies must be offered in at least one of the above listed four areas. While a course might satisfy more than one GE requirement, it may not be counted more than once for these purposes. A course may be used to satisfy both a GE requirement and a major or area of emphasis requirement.

All students awarded a degree must demonstrate competence in writing by obtaining a satisfactory grade in an English course at the level Freshman Composition or by demonstrating competency that is comparable to satisfactory completion of the specified English course, determined locally. Satisfactory completion of an English course at the level of Freshman Composition or higher satisfies both this competency requirement and the English Composition GE coursework requirement.

Competence in mathematics must be demonstrated by obtaining a satisfactory grade in a mathematics course at or above the level of the course typically known as Intermediate Algebra (either Intermediate Algebra or another mathematics course at the same level, with the same rigor and with Elementary Algebra as a prerequisite, approved locally) or by demonstrating competency that is comparable to satisfactory completion of a mathematics course at or above the level of the course typically known as Intermediate Algebra determined locally. Satisfactory completion of a mathematics course at or above the level of Intermediate Algebra satisfies both this competency requirement and the Communication and Analytical Thinking GE coursework requirement.

It should be noted that the competency requirements for written expression and mathematics may also be met by obtaining a satisfactory grade in courses in English and mathematics taught in or on behalf of other departments and disciplines, and which, as determined by the district governing board, require entrance skills at a level equivalent to those necessary for Freshman Composition and Intermediate Algebra respectively.

Requirements for demonstrating competency in reading shall be locally determined.

For the purpose of this section, "satisfactorily completed" means either credit earned on a "pass-no pass" basis or a grade point average of 2.0 or better in community college credit courses in the curriculum upon which the degree is based.

GE transfer patterns do not satisfy the requirement for a major or an area of emphasis. In other words, an associate degree cannot consist solely of courses from CSU GE-Breadth, IGETC, or the local GE pattern with the remaining units (to reach 60 semester or 90 quarter) in other GE courses or electives, selected at the student's discretion.

Students intending to transfer may be required to complete the appropriate GE pattern, which may include courses from CSU GE-Breadth, IGETC pattern, local GE, or GE pattern for a four-year institution in an adjacent state to fulfill CSU GE-Breadth, 18 or more semester units (or 27 quarter units) in a major or area of emphasis, and the balance of units (to reach 60 or 90 quarter) in transferable courses in order to receive an associate degree. There may also be additional graduation requirements at individual colleges, such as physical education. Some students who intend to transfer will complete more than 60 semester units or 90 quarter units in order to meet all requirements for the associate degree.

When an associate degree is developed for students who do not intend to transfer, a local GE pattern with a minimum of 18 semester units or 27 quarter units may be required. When colleges offer degrees with a choice of local or transfer GE, colleges should strongly recommend or require that a student select the appropriate GE pattern for the student's intended goal with advice from a counselor.

Electives and Local Graduation Requirements

Associate degrees may include additional graduation requirements or electives, if necessary, to bring the total degree-applicable units to a minimum of 60 semester units or 90 quarter units.

Criteria for Approval

Local associate degrees must meet the following criteria for approval:

- Submission must include all required documentation, including

  - Narrative,

  - CORs for all courses included in major or area of emphasis, and

  - Appropriate transfer preparation documentation from the list of allowable documents if the program is designed in total or in part for transfer preparation.

- Degree is submitted with program goal of "Local."

Program Narrative

All new and modified local associate degree proposals must include a narrative that addresses:

- Program Goals and Objectives – must address a valid transfer preparation, workforce preparation, basic skills, civic education, or local purpose

- Catalog Description – includes program requirements, prerequisite skills or enrollment limitations, student learning outcomes, and information relevant to program goal

- Program Requirements – includes course requirements and sequencing that reflect program goals. The GE pattern and the calculations used to reach the degree total must be shown following the program requirements table

- Master Planning – ways the program fits in the mission, curriculum, and master planning of the college and higher education in California

- Enrollment and Completer Projections – projection of number of students to earn degree annually

- Place of Program in Curriculum/Similar Programs – ways the program fits in college's existing program inventory

- Similar Programs at Other Colleges in Service Area–justification of need for program in the region

- Transfer preparation information, if transfer preparation is a component of the program

Other Documentation

If a program is designed to provide transfer preparation, as a component of, or as the primary intent of the degree, then it must include at least one of the following documents to substantiate the alignment of the degree with transfer preparation standards. When programs are designed to provide transfer preparation for more than one baccalaureate institution, documentation should demonstrate alignment with the requirements for lower division major preparation at no more than one institution. Appropriate documentation may include, but is not limited to, any of the following that sufficiently demonstrate this requirement:

- Programmatic articulation agreements

- ASSIST documentation verifying that a majority (51% or greater) of required courses in the program are articulated for the major (AAM) at the single baccalaureate institutions to which the program's students are likely to transfer

- Table of major requirements from the most recent catalogs, with catalog dates and page numbers cited, for targeted transfer institutions showing crosswalk with California Community Colleges program requirements

- Summary of lower division major preparation published or endorsed by relevant professional bodies or programmatic accreditors, with citations included

- Formal letters from the intended receiving institution that verify alignment of proposed program with their program curriculum

If a local program is intended to address community need the college must submit community-need-related documentation, such as letters of support, survey results, or anything that provides evidence that the program fulfills a need of the community. When seeking approval for such programs, the intent must be clearly expressed in the narrative portion of the proposal.

Certificates of Achievement

Standards and Definition

Title 5, § 55070 defines Certificate of Achievement as a credit certificate that appears by name on a student transcript, diploma, or completion award. All Certificates of Achievement must be submitted to the Chancellor's Office for chaptering. The college can develop and propose a Certificate of Achievement that includes coursework taken to satisfy transfer patterns established by the UC, CSU, or accredited public postsecondary institutions in adjacent states. Certificates of Achievement that consist solely of basic skills and/or ESL courses are not permitted.

Certificates of Achievement represent a well-defined pattern of learning experiences designed to develop certain capabilities that may be oriented to career or GE. Colleges must submit programs of 16 or more semester units or 24 or more quarter units of degree-applicable coursework for Chancellor's Office chaptering. Colleges may submit programs of 8 or more semester units or 12 or more quarter units of degree-applicable coursework for Chancellor's

office chaptering in order that the program may be included in the student transcript, and be titles as a Certificate of Achievement.

Community colleges may also award certificates for fewer than 16 semester units or 24 quarter units without Chancellor's Office chaptering, but must call such certificates something other than "Certificate of Achievement." Such certificates may not be noted on the student's transcript. The award names "Certificate of Completion" and "Certificate of Competency" are likewise reserved for noncredit certificates and may not be used for locally approved credit certificates.

Unit Thresholds and Requirements

As detailed above, a certificate that requires 16 or more semester units or 24 or more quarter units of degree-applicable coursework must be chaptered by the Chancellor's Office and must be called Certificate of Achievement. A certificate that requires fewer than 16 semester units or 24 quarter units may be submitted to the Chancellor's Office for chaptering if it requires at least 8 semester units or 12 quarter units of degree-applicable coursework, and it must be called a Certificate of Achievement.

Sequence of Courses

According to Title 5, § 55070 the award of a Certificate of Achievement should represent more than an accumulation of units. It should symbolize successful completion of patterns of learning experiences designed to develop certain capabilities that may be oriented to career or GE.

When a college creates a sequence of certificates in a single four-digit TOP Code, arranged such that a student must complete one level before taking another level and the set or sequence as a whole requires 16 semester units or 24 quarter units or more, then the entire certificate sequence must be submitted to the Chancellor's Office for chaptering. For example, if a college creates the low-unit certificates listed below but then makes the Level I low-unit certificate prerequisite to Level II, the college has essentially created a 16-unit program:

- Multimedia, Basic (or Level I) – 7 units

- Multimedia, Advanced (or Level II) – requires completion of Level I or equivalent skills and knowledge plus an additional 9 units

As such, the college needs to submit the entire 16 units for chaptering as a Certificate of Achievement. However, Chancellor's Office chaptering of these two certificates would not be possible if the Basic (Level I) certificate is not required for the Advanced (Level II) because each certificate requires fewer than 8 semester units.

Certificates in California State University General Education Breadth and Intersegmental GE Transfer Curriculum or Adjacent State Transfer Pattern

Title 5, § 55070 allows for the approval of Certificates of Achievement that satisfy transfer patterns of UC, CSU, or accredited public baccalaureate institutions in adjacent states, which award the baccalaureate degree. To maintain statewide consistency, only the two titles listed

below are permissible for this unique type of certificate:

- CSU GE-Breadth

- Intersegmental GE Transfer Curriculum (IGETC)

Certificates for public baccalaureate institutions in adjacent states may have any relevant title. Community colleges may not offer a Certificate of Achievement for completion of GE requirements for a private college or university or for completion of community college GE requirements.

Criteria for Approval

All new and modified Certificates of Achievement must meet the following criteria for approval.

Submission must include all required documentation, including:

- Narrative

- CORs for all courses included in major or area of emphasis

- Appropriate transfer preparation documentation from the list of allowable documents if the program is designed in total or in part for transfer preparation

Narrative

- Program Goals and Objectives – must address a valid transfer, workforce preparation, basic skills, civic education, or lifelong learning purpose. For the purposes of Chancellor's Office submission and approval, programs may select one of three program goals: transfer, CTE, or local. Transfer is applied only to certificates for CSU GE-Breadth IGETC. CTE is limited to certificates in a vocational TOP Code. Local is used for all other certificates, but may include certificates designed to prepare students for transfer.

- Catalog Description – includes program requirements, prerequisite skills or enrollment limitations, student learning outcomes, and information relevant to program goal

- Program Requirements – includes course requirements and sequencing that reflect program goals

- Master Planning – how it fits in the mission, curriculum, and master planning of the college and higher education in California

- Enrollment and Completer Projections – projection of number of students to earn certificate annually

- Place of Program in Curriculum/Similar Programs – how it fits in college's existing program inventory

- Similar Programs at Other Colleges in Service Area – justification of need for program in the region

Career Technical Education Certificates–Additional Documentation

In addition to a narrative, all new and modified CTE programs must include:

- Labor Market Information and Analysis – refer to the section VII for additional information

- Advisory Committee Recommendation – includes advisory committee membership, minutes and summary of recommendations

- Regional Consortia meeting minutes showing program recommendation

Apprenticeship programs do not require advisory committee and regional consortia minutes, but do require labor market information and analysis and an approval letter from the California Division of Apprenticeship Standards (DAS).

Local (non-CTE) Certificates–Additional Documentation

In addition to a narrative, all new and modified local certificates may include:

- Programmatic articulation agreements

- ASSIST documentation verifying that a majority (51% or greater) of required courses in the program are articulated for the major (AAM) at the single baccalaureate institutions to which the program's students are likely to transfer

- Table of major requirements from the most recent catalogs, with catalog dates and page numbers cited, for targeted transfer institutions showing crosswalk with California Community Colleges program requirements

- Summary of lower division major preparation published or endorsed by relevant professional bodies or programmatic accreditors, with citations included

- Formal letters from the intended receiving institution that verify alignment of proposed program with their program curriculum

Collaborative Programs

A collaborative program is one in which one or more colleges rely on another college or colleges to offer some of the coursework required for an approved degree or certificate. Collaborating colleges may either be in reasonable proximity to permit students to take classroom-based courses or the courses may be offered online through distance education local or shared platforms. This collaboration may be an ideal option for colleges who find themselves unable to add a specific ADT or a CTE degree or certificate to their offerings as a consequence of their inability to offer the entire breadth of required or restricted elective courses.

The development of collaborative programs can make better use of the California community college system's overall resources, facilitate legislated degree development mandates, and ensure that CTE programs meet regional workforce needs. Colleges determine the most effective and efficient pathway for the student when developing a collaborative program, which must be described through a written agreement between the colleges that delineates the responsibilities of each college with respect to the curriculum offered and the scheduling of classes. Any changes to the agreement should be mutually agreed upon to minimize any negative effects on students. A collaborative program should be designed and offered with students' needs in mind.

See Memo AA 19-44 on Collaborative Programs Eligibility Criteria and Submission Guidelines released October 22, 2019.

Labor Market Information and Analysis

Pursuant to Education Code § 78015 Labor Market Information (LMI) data is specifically required for all new CTE program proposals, where available. Current LMI and analysis, or other comparable information, must show that jobs are available for program completers within the local service area of the individual college and/or that job enhancement or promotion justifies the proposed curriculum. Regional, statewide, or national labor market evidence may be included as supplementary support, but evidence of need in the specific college service area or region is also necessary.

The proposal must include projections from LMI for the most applicable Standard Occupational Classification (SOC) codes and geographical regions to be served by the program. If these projections do not suggest adequate job openings in the college service area to provide employment for all program completers, then the proposal must explain what other factors may justify the program and make the LMI figures misleading.

Program proposals will be evaluated in light of the data regarding expected job openings within the next five years and the number of students that will complete the program per year, taking into account the number of completers in similar programs at other institutions within the geographical region. Chancellor's Office staff refers to Data Mart (https://datamart. cccco.edu/) to confirm the number of completers in a particular discipline.

If LMI is not available, other data sources may include:

- Recent employer surveys

- Industry studies

- Regional economic studies

- Letters from employers attesting to the service area need

- Minutes of industry advisory committee meetings (beyond required advisory committee meeting minutes)

- Job advertisements for positions in the individual college's service area

- Newspaper or magazine articles on industry or employment trends

- Applicable studies or data from licensing agencies or professional associations

A commonly referenced data source is the EDD's LMI system (www.labormarketinfo.edd.ca.gov), which provides statistical projections of growth in specific jobs by county (or labor market area). Title 5, § 55130 requires the college seeking approval of a new program to show the "relation of the proposed program to job market analysis, where applicable."

Table 10 — Labor Market Analysis: Suggested Areas of Discussion

Topic	Discussion Points for Labor Market Analysis
Net Job Market	• Given the number of enrollments that are projected for the program and that are necessary to support the program, are there enough openings locally to permit placement of the expected number of graduates? • Has the job market been declining slowly? Holding steady? Growing slowly? Growing rapidly? Recently emerging?
Earning Potential	• What is the average initial salary? • What is the average percentage of salary increase in two years? Five years?
Program Credibility/ Career Potential	• If advanced degrees are typically needed for career advancement, will the courses required for this program count toward completion of the requirements for those degrees? • Will this preparation permit students to remain current in their field? Does the program teach basic principles and theory, as well as application? Is it current and of sufficient rigor? Does it allow for later shifts in career? • Does this preparation meet the needs of those already employed for upward mobility, entrepreneurship, or a career upgrade? • Does the program prepare students to work in an ethnically diverse workforce and in an ethnically diverse, global market?

Topic	Discussion Points for Labor Market Analysis
Emerging Occupations	When job market data are not available or are not appropriate for a new CTE program in an area of emerging social need or technology, it becomes important to provide a careful analysis and explication of the specific demands of this new occupation. A carefully designed employer survey can elicit documentation demonstrating that employers: • Share the college's assumption regarding future direction(s) of the field and the skills that this emerging industry will require of employees. • Recognize the value of the proposed degree or certificate in the hiring or promoting of staff.
Competitive Fields	Colleges are often called upon to provide training that students greatly desire, even where the job prospects are limited and the field is highly competitive. In such occupations, often in the arts and entertainment, it is talent rather than education that drives hiring. While no community college certificate can substitute for talent, a program that is exceptionally well designed to identify and develop talent can still be justified when few programs of similar quality exist in the college service area.
Career Technical Education Skills	Many kinds of certificates are of occupational benefit to students already employed. In such circumstances, the program objectives and design, including the sequencing of courses, must fit the needs of students likely to be already employed. The course sequence must build on students' prior experience, and courses must be scheduled to accommodate working students. A program must not establish provisions that exclude students who are not already employed in a particular industry, unless the college makes available to such students a practicable entry-level pathway that would qualify them, upon completion, for the advanced training.
Small Businesses or Cottage Industries	Entrepreneurial opportunities and the market for cottage industries yield few statistics. Yet entrepreneurial opportunities are of value to an increasingly large proportion of the workforce, especially in rural areas. A proposal for approval of a program designed to meet the needs of students interested in pursuing entrepreneurial activities must include a careful analysis of needs and of the market within which they must compete.

When a proposed program is in an emerging occupation, finding relevant regional or local data can be challenging. One source of data for emerging occupations is available from the Centers of Excellence, an initiative of the Chancellor's Office Workforce and Economic Development (WED) Division. The Initiative website (www.coeccc.org) includes comprehensive reports on emerging occupations, called "Environmental Scans," as well as information about requesting customized reports if no scan has been published.

PART III: NONCREDIT CURRICULUM

SECTION 1: INTRODUCTION TO NONCREDIT PROGRAM AND COURSE APPROVAL

- History and Philosophy

- Legal Authority

- Development Criteria

- Open Courses

- Noncredit Curriculum Regulations

History and Philosophy

Noncredit instruction evolved from the first adult school in California in 1865. It was established by the San Francisco Board of Education, followed by Oakland in 1871, Sacramento in 1872, and Los Angeles in 1887. Noncredit instruction in the California Community Colleges is an important contributor to "open access" for students with diverse backgrounds. Noncredit courses often serve as a first point of entry for those who are underserved, as well as a transition point to prepare students for credit instruction and the workforce. Noncredit instruction is especially important for students who are the first in their family to attend college, for those who are underprepared for college-level coursework, and for those who are not native English speakers, among others.

Noncredit instruction is one of several educational options offered within the California Community College System. It offers students access to a variety of low and no cost courses including a focus on elementary and secondary basic skills, English as a second language, citizenship and workforce preparation, programs for adults with disabilities, short-term career technical education (CTE), parenting, older adult needs, health and safety, and home economics.

The benefits of noncredit curriculum for California Community College students are many. Noncredit courses are free and provide options for students who do not qualify for financial aid. Noncredit courses focus on skill attainment, not grades or units. They are repeatable and not affected by the 30-unit basic skills limitation. Noncredit courses can provide flexible scheduling and can be open entry/exit for students who are working and managing college at the same time. Noncredit courses are accessible to nearly all students and serve as elementary level skill building courses leading to pre-collegiate curriculum. Noncredit courses can also serve as a bridge to other educational/career pathways. They provide preparation, practice and certification in career and technical education. Noncredit courses may also be a point of entry into college-level courses for students who are not yet ready to enroll in a credit program.

Legal Authority

The Board of Governors, by statute, has statewide responsibility for approving all new instructional noncredit programs in community colleges. This mandate is one of the earliest and most basic legislative charges to the Board. Before 1968, approval of programs for junior colleges was the responsibility of the State Board of Education. When the Board of Governors of the California Community Colleges was created by the Legislature in 1968, this responsibility was transferred to the new board. It is now contained in Education Code section 70901:

> ### 70901: Board of governors; duties; rules and regulations; delegation; consultation
>
> *(a) The Board of Governors of the California Community Colleges shall . . . perform the following functions:…*
>
> *(b)(10) Review and approve all educational programs offered by community college districts, and all courses that are not offered as part of an educa-tional program approved by the board of governors.*

The Legislature also made the requirement for state approval part of the finance law for community colleges. This provision was part of the Education Code for many decades, but in 1991, it was shifted to California Code of Regulations, Title 5, § 58050:

58050: Conditions for Claiming Attendance.

(a) All of the following conditions must be met in order for the attendance of students enrolled in a course to qualify for state apportionment:

(1) The course or the program of which it is a part must be approved by the Board of Governors in accordance with the provisions of subchapter 2 (commencing with section 55100) of chapter 6.

(2) The course must meet the criteria and standards for courses prescribed by section 55002.

To facilitate coordinated efforts between local and system responsibilities and curriculum processes, in 2004, the Chancellor's Office developed the System Advisory Committee on Curriculum (SACC), which in 2016 was renamed the California Community Colleges Curriculum Committee to more accurately reflect its charter. The committee provides a collaborative forum for system-level discussions pertaining to curriculum to guide related Chancellor's Office policies and practices.

Minimum Conditions

Minimum Conditions are selected areas of regulations that may result in denial or reduction of state aid if violated. These minimum conditions are contained in title 5, sections 51000-51027. The Minimum Condition regulation on program and course approval is as follows:

51021: Curriculum

Each community college shall establish such programs of education and courses as will permit the realization of the objectives and functions of the community college. All courses shall be approved by the Chancellor in the manner provided in subchapter 1 (commencing with section 55000) of chapter 6.

Both California Education Code and California Code of Regulations, Title 5, grant other specific authority for the approval of certain types of curriculum to district governing boards, without requiring separate approval by the Board of Governors through the Chancellor's Office. The authority of district governing boards to approve courses without separate approval from the Board of Governors or the Chancellor is established in Education Code § 70902(b)(2), which states that, "The [district] governing board shall establish policies for, and approve, individual courses that are offered in approved educational programs without referral to the board of governors." The minimum conditions set forth in Title 5, § 51021, require that all curriculum must be approved by the Chancellor in a manner consistent with the standards set forth in § 55150, et seq., which falls within the section referenced in § 51021, then reaffirms the authority of district governing boards to approve courses in approved educational programs, stating that they "…need not be separately approved by the Chancellor." Taken together these regulations underscore the complementary, but distinct, roles and authorities for various components of the California Community College system.

Chancellor's Office Curriculum Review

California Education Code and California Code of Regulations, Title 5, provide the mandate on the content of program and course proposals. The Chancellor's Office reviews community college proposals pursuant to Title 5 regulations. Community college course and program approval must be submitted electronically using the California Community Colleges curriculum inventory system. All courses and programs are submitted to the Chancellor's Office for chaptering.

Elements of "approval" processes:

1. The District Governing Board approves the course or program

2. The Chancellor's Office chapters the course or program and a control number is issued.

NOTE: Unlike credit CTE programs, approval of noncredit short-term vocational programs does not require regional consortium recommendation.

Colleges that receive Chancellor's Office chaptering of a new noncredit program or course are authorized to:

*   Publish the description of a new program or course in the catalog or publicize a new program or course in other ways (CCR, Title 5, § 55005).

*   Collect state apportionment for student attendance (Ed. Code § 70901(b)(10); CCR, Title 5, §§ 55130 and 58050). Colleges that do not secure the required program approval are subject to loss of revenues through audit or administrative action.

*   Award a certificate with the designated title and require specific courses for the completion of a certificate (Ed. Code, §§ 70901(b)(10) and 70902(b)(2)).

*   Collect Related and Supplemental Instruction (RSI) funding if the Division of Apprenticeship Standards (DAS) has also formally approved a proposed apprenticeship program.

Development Criteria

Five criteria are used by the Chancellor's Office to review and chapter both credit and noncredit programs and courses that are subject to Chancellor's Office review. They were derived from statute, regulation, intersegmental agreements, guidelines provided by transfer institutions and industry, recommendations of accrediting institutions, and the standards of good practice established in the field of curriculum design.

These criteria have been endorsed by the community college system as an integral part of the best practice for curriculum development.

The five criteria are as follows:

*   Appropriateness to Mission

- Need

- Curriculum Standards

- Adequate Resources

- Compliance

Full explanations of these criteria are provided in Part 1, Section 1 of this Handbook.

Open Courses

Title 5, § 51006, requires colleges to publish a statement in the official catalog and schedule of classes that all course sections or classes for which state aid is awarded are open to enrollment and participation by any person admitted to the college. The college may only restrict enrollment in a noncredit course when the restriction is specifically required by statute or legislation. This section also allows colleges to require that students meet advisories that have been established pursuant to Title 5, § 55003. Situations where enrollment limitation may be allowed are discussed more specifically in Title 5, § 58106. These sections allow the college to restrict students from enrolling in a course when:

- Health and safety considerations, facility limitations, faculty availability, funding limitations, or other constraints have been imposed by statutes, regulations, or contracts.

The college can limit enrollment only through one or more of the following approaches:

- Enrolling on a "first-come, first-served" basis or other non-evaluative selection technique (CCR, Title 5, § 58006)

- Offering special registration assistance to the handicapped or disadvantaged student

- Enrolling in accordance with a priority system established by the local board

- Allocating available seats to students who have been judged most qualified in the case of intercollegiate competition, honors courses, or public performance courses

- Limiting enrollment to a cohort of students enrolled in two or more courses, provided, however, that a reasonable percentage of all sections of the course do not have such restrictions

- Restricting enrollment of a student on probation or subject to dismissal or to selected courses or of a student who is required to follow a prescribed educational plan

The open course concept means that no noncredit course may be offered for apportionment if it is restricted to a particular group, such as employees of a particular company or organization, students concurrently enrolled in a neighboring university, persons of a particular ethnicity, or any other narrowly defined group. Furthermore, although a noncredit course may be designed primarily for individuals in a particular group (for example, individuals already employed in a particular occupation), it may not be offered

for apportionment unless it is open to, and designed in such a way that it could also be of benefit to, other students. Thus, a course may be primarily intended for skills upgrading of individuals already experienced in a particular occupation, but it must also be possible for a student in training for that occupation to take and benefit from the course, subject to legally established advisories.

Certain narrow exceptions to the open course rule are specified in law. These include enrollment preference for fire service personnel (CCR, Title 5, § 58051(d)) and law enforcement trainees (Pen. Code, § 832.3(c)), courses conducted in a jail or federal prison (CCR, Title 5, § 58051.6), students who are part of a cohort concurrently enrolled in another specified course (CCR, Title 5, § 58106), and apprentices in "related and supplemental instruction" courses (Lab. Code, § 3076.3).

Noncredit Curriculum Regulations

The legal parameters and standards for curriculum are established in the following sections of Education Code and California Code of Regulations.

Noncredit curriculum is defined in Title 5, § 55002(c): "A noncredit course is a course which, at a minimum, is recommended by the college and/or district curriculum committee (the committee described and established under subdivision (a) (1) of this section) and approved by the district governing board as a course meeting the needs of enrolled students."

Noncredit instruction is one of several educational options authorized by Education Code § 84757 to be offered within the California Community Colleges. Students are offered access to a variety of courses at no cost, other than textbooks and other materials, to assist them in reaching their personal, academic, and professional goals.

Table 11 — Mandates and Regulations Related to Noncredit Course Standards and Approval

Authority	Topic
Ed. Code, § 66010.4(a)(1)	Missions and Functions of California Community Colleges
Ed. Code, § 70901(b)(1)(D)	Minimum Standards for Credit and Noncredit Courses
Ed. Code, § 78401(a)	Governing Board of any community college district's authority to maintain and establish courses for adults
Ed. Code, § 79144	Definitions of Apprenticeship Programs
Ed. Code, § 84750.5	Annual Budget Requests
Ed. Code, § 84757(a)(1-9)	Noncredit Courses Eligible for Funding
Ed. Code, § 84760.5	Attendance Hours Generated by Instruction in Career Development and College Preparation
Ed. Code, § 84810.5(a)(2)	Inmate Education Programs
Title 5, § 51006	Open Course Regulations

Authority	Topic
Title 5, § 53200	Definitions (Faculty, Academic Senate, Academic and Professional Matters, and Consult Collegially)
Title 5, § 53412	Minimum Qualifications for Instructors of Noncredit Courses
Title 5, § 53414(e)(1-4)	Minimum Qualifications for Disabled Students Programs and Services Employees
Title 5, § 55000	Definitions
Title 5, § 55000(g)	Contract Course
Title 5, § 55002(a)(1)	Standards and Criteria for Courses (Curriculum Committees)
Title 5, § 55002(c)(1)(2)(3)	Standards and Criteria for Courses (c) (Noncredit Course Standards)
Title 5, § 55003	Policies for Prerequisites, Corequisites and Advisories on Recommended Preparation.
Title 5, § 55021	Grading Policies
Title 5, §§ 55040-55046	Course Repeatability Regulations
Title 5, § 55050	Credit by Examination
Title 5, § 55064	Acceptance of Noncredit Courses
Title 5, § 55100	Course Approval
Title 5, § 55150	Approval of Noncredit Courses and Programs
Title 5, § 55151	Career Development and College Preparation
Title 5, § 55154	Adult High School Diploma Programs
Title 5, § 55155	Noncredit Certificates
Title 5, §§ 55200-55210	Distance Education
Title 5, § 55220	Excursions and Field Trips
Title 5, § 55222	Provision of Medical or Hospital Service for Students
Title 5, § 56028	Educational Assistance Class Instruction
Title 5, § 58003.1(f)(2)	Full-time Equivalent Student; Computation
Title 5, § 58007	Noncredit Courses
Title 5, § 58012	Decimals; Rounding Off; References to Whole Numbers (Attendance Reporting)
Title 5, § 58051.5	Reports for Apportionment; Prohibited Classes

Authority	Topic
Title 5, § 58102	Course Description
Title 5, § 58104	Dissemination of Information
Title 5, § 58130	Noncredit Classes in Dancing of Recreational Physical Education; State Aid or Apportionment for Attendance
Title 5, § 58160	Noncredit Course Funding
Title 5, § 58161.7	Recommendations Regarding Repetition of Noncredit Courses and Related Issues
Title 5, § 58164	Open Entry/Open Exit Courses
Title 5, § 58168	Tutoring
Title 5, § 58170	Apportionment for Tutoring
Title 5, § 58172	Learning Assistance
Title 5, § 58760	Description of Noncredit Activities
Title 5, § 58762	Noncredit Activities

SECTION 2: NONCREDIT COURSE CRITERIA AND STANDARDS

- **Noncredit Course Criteria**
  Noncredit instruction is one of several educational options authorized by Education Code § 84757 to be offered within the California Community Colleges. Students are offered access to a variety of courses at no cost, with the exception of textbooks and other materials, to assist them in reaching their personal, academic, and professional goals.

  This section provides an overview of the criteria used by the Chancellor's Office staff in evaluating noncredit course submissions. The review criteria used by the Chancellor's Office staff are rooted in the curriculum standards established in Title 5, § 55000 et. seq., and explained in the Noncredit Course Standards section of this Handbook. To ensure that standards for all criteria are met, and is organized as follows:

  - Noncredit Categories

  - Criteria for Data Elements

- **Noncredit Course Standards**
  This section provides an overview of the standards for all noncredit course curricula, including requirements for local approval, the COR, and MIS data elements. This section is organized as follows:

  - The Course Outline of Record for Noncredit Courses

  - Standards for Approval of Noncredit Curriculum

  - Other Topics and Standards in Noncredit Courses

Noncredit Course Criteria

Noncredit Categories

Noncredit courses are classified into ten legislated instructional areas (nine defined in Ed. Code § 84757 and the tenth is defined in CCR, Title 5, § 55151). The placement of a course in a given instructional area is driven by the course objectives and target population to be served.

The 10 instructional areas are:

1. English as a Second Language

2. Immigrant Education

3. Elementary and Secondary Basic Skills

4. Health and Safety

5. Substantial Disabilities

6. Parenting

7. Home Economics

8. Courses for Older Adults

9. Short-term Vocational Programs

10. Workforce Preparation

In addition, community colleges can claim apportionment for supervised tutoring and learning assistance subject to regulations under Title 5.

1. **English as a Second Language** (ESL) courses provide instruction in the English language to adult, non-native English speakers with varied academic, career technical, and personal goals. ESL courses include, but are not limited to: skills or competencies needed to live in society; skills and competencies needed to succeed in an academic program; preparation for students to enter career and technical programs at the community colleges; programs focusing on skills parents need to help their children learn to read and succeed in society; skills needed to fully participate in the United States civic society or to fulfill naturalization requirements; ESL-based skills and competencies in computer software, hardware, and other digital information resources; and functional language skills. Note: Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22). Noncredit courses in this instructional category are eligible for career development and college preparation ("CDCP") enhanced funding when approved in accordance with applicable statutory and regulatory policies. Refer to the Noncredit Career Development and College Preparation section of this Handbook for additional information on noncredit CDCP

certificate programs. (Ed. Code § 84757(a)(3)).

2. **Immigrant courses** are designed for immigrants eligible for educational services in citizenship, ESL, and workforce preparation courses in the basic skills of speaking, listening, reading, writing, mathematics, decision-making and problem-solving skills, and other classes required for preparation to participate in job-specific technical writing. Instructional courses and programs should support the intent of the Immigrant Workforce Preparation Act. In those cases where the purpose of the course is to serve a special population, (e.g., older adults, immigrants, persons with substantial disabilities, parents), the catalog description must demonstrate that the course is designed to meet the interests and needs of that target population. Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22) (Ed. Code § 84757(a)(4)).

3. **Elementary and Secondary Basic Skills** includes basic skills academic courses in reading, mathematics, and language arts. Basic skills courses provide instruction for individuals in elementary and secondary-level reading, writing, computation and problem-solving skills in order to assist them in achieving their academic, career, and personal goals. Elementary-level coursework addresses the content and proficiencies at levels through the eighth grade. Secondary-level coursework focuses on the content and proficiencies at levels through the twelfth grade and may incorporate the high school diploma. Note: Noncredit courses in this instructional category are eligible for career development and college preparation ("CDCP") enhanced funding when approved in accordance with applicable statutory and regulatory policies. Refer to the Noncredit Career Development and College Preparation section of this Handbook for additional information on noncredit CDCP certificate programs. Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22) (Ed. Code § 84757(a)(2)).

4. **Health and Safety** courses focus on lifelong education to promote health, safety, and the well-being of individuals, families, and communities. Courses and programs in health and safety provide colleges with the opportunities to network or partner with other public welfare and health organizations. Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22) (Ed. Code § 84757(a)(9)).

5. **Substantial Disabilities** courses are designed to provide individuals with life-skill proficiencies essential to the fulfillment of academic, career technical, and personal goals. A student with a disability is a person who has a verified disability which limits one or more major life activities, as defined in 28 Code of Federal Regulations § 35.104, resulting in an educational limitation as defined in title 5, section 56001. Courses for students with substantial disabilities are an "assistance class" according to provisions

of Title 5, § 56028, and Education Code § 84757(a)(5).

Educational Assistance Classes are instructional activities designed to address the educational limitations of students with disabilities who would be unable to substantially benefit from regular college classes even with appropriate support services or accommodations. Such classes generate revenue based on the number of full-time equivalent students (FTES) enrolled in the classes. Such classes shall be open to enrollment of students who do not have disabilities; however, to qualify as a special class, a majority of those enrolled in the class must be students with disabilities. In those cases where the purpose of the course is to serve a special population, (e.g., older adults, immigrants, persons with substantial disabilities, parents), the catalog description must demonstrate that the course is designed to meet the interests and needs of that target population.

Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22)

6. **Parenting** includes courses and programs specifically designed to offer lifelong education in parenting, child development, and family relations in order to enhance the quality of home, family, career, and community life. Instructional areas may include, but are not limited to the following: ages and stages of child growth and development; family systems; health nutrition and safety; family resources and roles; family literacy; fostering and assisting with children's education; guiding and supporting children; and court-ordered parenting education. In those cases where the purpose of the course is to serve a special population, (e.g., older adults, immigrants, persons with substantial disabilities, parents), the catalog description must demonstrate that the course is designed to meet the interests and needs of that target population. Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22) (Ed. Code § 84757(a)(1)).

7. **Home Economics** or family and consumer sciences includes courses and programs designed to offer lifelong education to enhance the quality of home, family, and career and community life. This area of instruction provides educational opportunities that respond to human needs in preparing individuals for employment, advanced study, consumer decision making, and lifelong learning. Instruction in family and consumer sciences emphasizes the value of homemaking. The focus of the categories of coursework includes, but is not limited to, child development, family studies and gerontology, fashion, textiles, interior design and merchandising, life management, nutrition and foods, and hospitality and culinary arts. Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22) (Ed. Code § 84757(a)(8)).

8. **Courses for Older Adults** offer lifelong education that provides opportunities for personal growth and development, community involvement, skills for mental and physical well-being, and economic self-sufficiency. Courses in the category of noncredit instruction for older adults may include, but are not limited to, health courses focusing on physical and mental processes of aging, changes that occur later in life, and steps to be taken to maintain independence in daily activities; consumer resources, self-management and entitlement; creative expression and communication; or family, community, and global involvement. In those cases where the purpose of the course is to serve a special population, (e.g., older adults, immigrants, persons with substantial disabilities, parents), the catalog description must demonstrate that the course is designed to meet the interests and needs of that target population. Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22)) (Ed. Code § 84757(a)(7)).

9. **Short-term Vocational Programs** are designed for high employment potential that lead to a career-technical objective, or a certificate or award directly related to employment. Short-term vocational programs should be designed to: improve employability; provide job placement opportunities; or prepare students for college-level coursework or transfer to a four-year degree program. They shall also be mission appropriate (Ed. Code § 66010.4(a)(1)), meet a documented labor market demand, ensure there is no unnecessary duplication of other employment training programs in the region, demonstrate effectiveness as measured by the employment and completion success of students, and be reviewed in the institution's program review process every two years. Generally, noncredit short-term vocational educational programs are designed in a manner that allows for a completion timeframe of one year or less. Note: Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22). Noncredit courses in this instructional category are eligible for career development and college preparation ("CDCP") enhanced funding when approved in accordance with applicable statutory and regulatory policies. Refer to the Noncredit Career Development and College Preparation section of this Handbook for additional information on noncredit CDCP certificate programs. (Ed. Code, §§ 78015, 78016, and 84757(a)(6)).

10. **Workforce Preparation** courses provide instruction for speaking, listening, reading, writing, mathematics, decision-making and problem-solving skills that are necessary to participate in job-specific technical training. Note: Refer to the Chancellor's Office Management Information Systems Data Element Dictionary (COMIS DED) for a list of TOP codes assigned to this noncredit category (CB22). Noncredit courses in this instructional category are eligible for career development and college preparation ("CDCP") enhanced funding when approved in accordance with applicable statutory and regulatory policies. Refer to the Noncredit Career Development and College

Preparation section of this Handbook for additional information on noncredit CDCP certificate programs. (CCR, Title 5, § 55151).

Refer to the section in this Handbook titled, Other Topics and Standards in Noncredit Courses for specific guidelines on tutoring and supplemental learning assistance. In addition to the ten eligible areas, Title 5, §§ 58168-58172 authorize community colleges to claim apportionment for supervised tutoring and learning assistance under noncredit. Apportionment for supplemental learning assistance may be claimed for credit supplemental courses in support of primary/parent credit courses, or for noncredit supplemental courses (in any of the ten noncredit eligible areas outlined in Ed. Code, § 84757) in support of primary/parent noncredit courses. Only in limited circumstances, such as ESL and basic skills, may colleges offer noncredit supplemental learning assistance courses in support of credit courses. Also, in occupational areas, colleges may establish supplemental noncredit short-term vocational courses in support of credit occupational courses.

Criteria for Noncredit Course Submissions

Local districts are responsible for ensuring that the submitted Course Outline of Record (COR) contains all required elements as specified in section 55002 and that local approval is consistent with all standards in Title 5, § 55000 et seq. The Chancellor's Office reviews and chapters noncredit course submissions to ensure that courses meet these standards and to validate that the associated data elements for each course are correct and compliant with regulations. The review criteria used by the Chancellor's Office staff are based on the standards for course curriculum established in Title 5 and explained in the Noncredit Course Standards section of this Handbook. Submission and approval of noncredit courses is conducted through review of the following components submitted by local colleges:

- Completed Curriculum Inventory Proposal Fields for Data Elements

- COR meeting the standards in Title 5, § 55002, and approved by the district governing board

Criteria for Data Elements

The following data elements are entered into the CHANCELLOR'S OFFICE CURRICULUM INVENTORY SYSTEM and evaluated by Chancellor's Office staff during the submission review process. The Chancellor's Office MIS Division identifies some of these data elements as Course Basic (CB) codes. Many course elements require CB codes. Other course elements such as District Governing Board Approval Date and Catalog Description do not require CB codes, but are critical components of the review process. Entry errors associated with these elements and inconsistencies can result in course submissions being returned to the college for revisions.

Table 12 — Data Elements

DED Number	Data Element Name
CB00	Course Control Number (this number is assigned by the Chancellor's Office, it is not necessary for new courses)
CB01	Department Number
CB02	Course Title
CB03	TOP Code
CB04	Credit Status
CB05	Transfer Status
CB08	Basic Skills Status
CB09	SAM Priority Code
CB10	Cooperative Work Experience
CB11	Course Classification Status
CB13	Educational Assistance Class Instruction (Approved Special Class)
CB21	Prior Transfer Level
CB22	Noncredit Category
CB23	Funding Agency Category
CB24	Program Status
CB26	Course Support Course Status

CB01: Department Number

This identifier should be structured to include an abbreviation of the department to which the course belongs, followed by the numbers and/or letters used to distinguish it from other courses in the same department. It is the identifier that occurs on the student's academic transcript, for example, ESL501. The department number must be entered exactly as it is entered into the college and/or district's enterprise resource system. If there are no spaces between the department and course number, do not add a space in the CI. Inconsistencies in data entry will impact MIS reporting.

CB02: Course Title

This data element records the course title exactly as it appears in the COR and the college catalog. If the college uses long and short titles, enter the long title. This field is limited to a maximum of 68 characters including punctuation and spaces, and the title must be different from what is entered in CB01.

CB03: TOP Code

This field is for recording the appropriate TOP Code for the course. An asterisk (*) in this field denotes a vocational TOP Code. A link to the Taxonomy of Programs (TOP) Code Manual, 6th Edition is available on the Chancellor's Office website, under Educational Services and Support Curriculum and Instruction page.

The TOP Code should be assigned according to the content and outcomes of the course, and must conform closely to the TOP Code given to similar courses at other colleges around the state. The TOP Code reflects the main discipline or subject matter and is not based on local departmental structure, faculty qualifications, or budget groupings. A college that has difficulty identifying the most appropriate TOP Code should contact the Chancellor's Office; if the proposed TOP Code does not seem appropriate, the Chancellor's Office will advise the college.

CB04: Credit Status

This element indicates the credit status of a course (defined in CCR, Title 5, § 55002). All noncredit courses will select "N" (noncredit) in this field, indicating the course is noncredit.

CB05: Transfer Status

This element indicates the transfer status of a course. The Chancellor's Office curriculum inventory system automatically populates this field with C-Not Transferable, the only available option for noncredit courses.

CB08: Basic Skills Status

The basic skills status is indicated as either B (Course is a basic skills course) or N (course is not a basic skills course).

CB09: Student Accountability Model (SAM) Priority Code

This element is used to indicate the degree to which a course is occupational, and to assist in identifying course sequence in occupational programs. This element corresponds with the CB03 TOP Code selected. For example, if a vocational TOP Code is selected as denoted by an asterisk (*), then CB09: SAM Priority Code must equal A (Apprenticeship), B (Advanced Occupational), C (Clearly Occupational), or D (Possibly Occupational), and respectively cannot equal E (Non-occupational).

CB10: Cooperative Work Experience

This element indicates whether the course is part of a cooperative work experience education program, according to the provisions of Title 5, § 55252. Only credit courses may be coded "C" when part of a cooperative work experience educational program. Noncredit courses must be coded "N" (Is not part of a cooperative work experience educational program).

CB11: Course Classification Status

This element classifies a course in accordance with its primary objective. This field is auto-populated with "Y" denoting the Classification Status is a Credit Course.

CB13: Educational Assistance Class Instruction (Approved Special Class)

This data element indicates whether the course is "educational assistance class instruction" according to the provisions of Title 5, § 56028, and will be coded "S" (Couse is designated as an approved special class for students with disabilities) or "N" (Course is not a special class).

CB21: Prior Transfer Level

This element indicates course level status for English writing/reading, ESL, mathematics/quantitative reasoning courses. The English writing/reading and mathematics/quantitative reasoning rubrics were updated spring 2019. The ESL rubrics were updated fall 2019. Indicate the relationship of the course to college level by selecting one of the following seven options:

Y - Not applicable

A - One level below transfer

B - Two levels below transfer

C - Three levels below transfer

D - Four levels below transfer

E - Five levels below transfer

F - Six levels below transfer

For example, a course such that when the student successfully completes the course means the student is ready for transfer level would be coded as "A". Some courses may span several levels.

The selected code must correspond with the CB05: Transfer Status selected, as well as with processing edit checks in the Chancellor's Office MIS Data Element Dictionary (DED); please consult the DED for a complete listing of fidelity and integrity checks for this element. Additionally, extensive rubrics were created to determine appropriate coding for this element. These rubrics can be found on the Basic Skills Initiative website (http://www.cccbsi.org).

CB22: Noncredit Category

This element classifies a noncredit course in accordance with its primary objective within the ten state-supported noncredit categories set forth in Education Code section 84757(a). Select the appropriate noncredit category:

A - ESL

B - Citizenship for Immigrants

C - Elementary and Secondary Basic Skills

D - Health and Safety

E - Courses for Persons with Substantial Disabilities

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F - Parenting

G - Home Economics

H - Older Adults

I - Short-term Vocational

J - Workforce Preparation

CB23: Funding Agency Category

This element describes whether or not a Chancellor's Office Economic Development Grant was used to fully or partially develop a course and/or curriculum. Select one of the following three options:

A - primarily developed using Economic Development funds

B - partially developed using Economic Development Funds, exceeding 40% of total development costs

Y - not applicable

CB24: Program Status

This element indicates whether or not a course is part of an educational program as defined in Title 5, § 55000. Select one of the two following options:

1 - Program-applicable – the noncredit course is part of a sequence of courses or program that results in a certificate of completion or certificate of competency

2 - Not Program-applicable – the noncredit course is not part of a sequence of courses or program that results in a certificate of completion, certificate of competency, adult high school diploma program, or noncredit apprenticeship program

CB26: Course Support Course

This element indicates whether a course is associated with another degree-applicable course for the purpose of providing the support necessary to complete the associated course.

Course Hours

Course Hours Minimum
This field indicates the minimum number of contact hours for the course as a whole. This value does not include out-of-class hours. Enter the minimum number of regularly scheduled hours of instruction that are normally required for a student to achieve the course objectives, sufficiently covering the course scope and breadth of topics. This number must be entered in CI as a decimal. For example, ten and one-half hours would be entered as 10.5.

Course Hours Maximum

This field indicates maximum number of contact hours of the course as a whole. This value does not include out-of-class hours. Enter the maximum number of regularly scheduled hours of instruction that are normally required for a student to achieve the course objectives, sufficiently covering the course scope and breadth of topics. This number must be entered in CI as a decimal. For example, ten and one-half hours would be entered as 10.5. This number must be greater than or equal to the number entered in the course hours minimum field.

Special Characteristics Code Descriptor

This code is used to identify special characteristics of the noncredit course. Select the appropriate characteristic(s) from the following seven options (if applicable):

- Learning Assistance – a form of supplemental instruction

- Bilingual Instruction – a system of instruction that builds upon the language skills of a pupil whose primary language is not English or derived from English

- Convalescent Setting – a course taught in a convalescent home, skilled nursing facility, residential care home, day care center, or nursing home

- Correctional Facility – a course taught either at or through a federal, state, or local correctional institution

- Apprenticeship – a course that provides related and supplemental instruction for apprenticeship and coordination of instruction with job experience, upon agreement with the program sponsor/employer and the California Division of Apprenticeship Standards

- Persons of Substantial Disabilities – a course designed to serve persons with substantial disabilities

- Citizenship for Immigrants – a course designed to provide instruction and services in citizenship

District Governing Board Approval Date

This section requires the date that the district governing board, pursuant to Title 5, §§ 55002 and 55100, originally approved the course.

Catalog Description

Enter the catalog description exactly as it appears in the COR and the college catalog.

Noncredit Course Standards

The Course Outline of Record for Noncredit Courses

All noncredit courses are required to have an official Course Outline of Record (COR) that meets the standards in Title 5, § 55002 (a)(3). Current CORs must be maintained in the official college files (paper or electronic database) and made available to each instructor.

The following COR components are required for noncredit courses (Title 5 §55002(c)(2)):

- Number of contact hours normally required for a student to complete the course

- Catalog description

- Objectives

- Content in terms of a specific body of knowledge

- Instructional methodology

- Examples of assignments and/or activities

- Methods of evaluation for determining whether the stated objectives have been met

It is recommended that CORs include, at a minimum, the following elements:

- Course number and title

- Status (noncredit versus credit or others)

- Contact Hours

- Catalog Description

- Prerequisites, corequisites, advisories on recommended preparation, or other enrollment limita-tions (if any)

- Enrollment Repetition Limitations

- Student Learning Outcomes (in COR or addendum – ACCJC requires student learning outcomes to be in official course outline)

- Representative Textbook(s), including open educational resources that meet course stand-ards (necessary for articulation)

- Field Trips

These standards place the burden of rigor upon the curriculum committee to determine that course elements of the COR are appropriate to the intended students.

In addition to these components, Chancellor's Office chaptering of noncredit courses requires the submission of all MIS data elements listed in the previous section of this Handbook. While

there is no regulatory requirement that these are listed on the COR, good practice suggests that MIS data elements should be included as part of the local curriculum review and submission process, whether on the COR or on attachments to the COR.

For a detailed discussion of good practices related to COR development and the explanations of the standards for local course approval set forth in Title 5, refer to the ASCCC paper titled, The Course Outline of Record: A Curriculum Reference Guide Revisited (2017), which may be downloaded from the ASCCC website (www.asccc.org) under the "publications" tab.

Contact Hours

This is the number of instructional hours normally required for a student to complete the course of study. Instructional hours should be sufficient to cover the scope and breadth of the course and to ensure student progress toward achieving the course objectives. Contact hours may be stated as a specific number or a range of minimum to maximum number of hours according to local practice.

Standards for Approval of Noncredit Curriculum

All noncredit courses offered by a community college are subject to approval by the district governing board (often called "local approval"). Local approval of noncredit courses must include review by a curriculum committee established in accordance with Title 5, § 55002. The curriculum committee and district governing board must determine that the noncredit course meets the standards of title 5, §§ 55002, 55002.5, 55003, 55062, and all other applicable provisions of title 5. These standards are explained in the ASCCC paper, "The Course Outline of Record: A Curriculum Reference Guide Revisited (2017)." In addition, all noncredit courses must be appropriate to the mission of the California Community College system, as defined in Education Code § 66010.4, and must be consistent with the requirements of accrediting agencies.

Curriculum approval at the local level plays a central role in ensuring that noncredit students receive the same quality of instruction provided to other students. More importantly, it is the fundamental mechanism that engages faculty in the design and evaluation of noncredit curriculum and its effectiveness in helping students to transition to college, gain meaningful wage work and contribute to the community and civic society.

Requirements for local curriculum approval include:

- Local curriculum committee approval of all noncredit courses or sequences of courses constituting a program.

- The curriculum committee conducting review has been established by mutual agreement between the college and/or district administration and the local academic senate. The committee is a committee of the local academic senate or a committee that includes primarily faculty.

- The curriculum committee shall recommend approval of the course only if the course:

  ○ covers the appropriate subject matter and

  ○ uses resource materials, teaching methods and standards of attendance and achievement that the committee deems appropriate.

- The COR shall specify the scope, objectives, content, instructional methodology, and methods of evaluation for determining whether the stated objectives have been met.

- The COR serves as the official record of the noncredit course description, is maintained in the official college files, and is made available to each instructor.

- The COR indicates approval by the curriculum committee and other entities dependent upon local practice.

- All sections of the noncredit course are taught by a qualified instructor in accordance with the set of objectives and other specifications defined in the COR.

- The district governing board has approved all noncredit courses.

- For the purposes of noncredit state apportionment, courses fall within one of the categories listed in Education Code §§ 84757, 84750.5, and 84760.5 and are chaptered by the Chancellor's Office.

Other Topics and Standards in Noncredit Courses

Conduct of Noncredit Courses
The conduct of noncredit courses is defined in Title 5, § 55002(a)(4) "Conduct of Course." Each section of the course is 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." All sections of the course are to be taught by a qualified instructor pursuant to Title 5, § 53412.

Repetition and Noncredit Courses
There are no specific limitations on noncredit course repetition. Noncredit repetition and multiple enrollments are defined as follows:

- Repetition in noncredit courses – the student has completed the maximum number of hours required for the course and re-enrolls and repeats the same course content.

- Re-enrollment in noncredit courses – a student has completed fewer than the maximum number of hours required for the course and re-enrolls in the same course during another term. The student then proceeds in the course and completes subsequent content or another portion or all of the required hours for the course.

- Multiple enrollments in noncredit courses – a student enrolls in more than one section of the same course during the same term to provide additional opportunity for

instruction and mastery of skill of knowledge.

- Completion of noncredit courses – a student has participated in the course for the total number of hours specified on the course outline. The hours required for a noncredit course completion may be accumulated in one section during one term, over multiple terms or by enrolling in multiple sections during a single term or terms.

Grading Policy for Noncredit Courses

The grading policy for noncredit courses is defined in title 5, section 55021(c): "The grading policy may provide for award of grades in noncredit courses, including courses which are part of a high school diploma program or may be accepted for high school credit by a high school."

Acceptance of Noncredit Courses towards Requirements for an Associate Degree

Students may seek to receive credit for knowledge or skills acquired through completion of a noncredit course in accordance with Title 5, § 55050. The governing board of each community college district shall establish and publish administrative procedures to implement Credit by Examination. These procedures shall assure all such examinations are established by faculty in accordance with the standards set out in Title 5, § 55050. Refer to your local credit by examination policy and procedure.

Apportionment and Noncredit Courses

Title 5, § 58130, clearly states, "[n]o state aid or apportionment may be claimed on account of the attendance of students in noncredit classes in dancing or recreational physical education." While the courses may still be approved and offered under the current noncredit course approval policies, these courses may not be included in attendance data for apportionment purposes. Determining whether or not a course falls into these categories and deciding if a course should be added to the schedule is a matter of careful consideration for each campus. Respectively, an ongoing review of noncredit course offerings in the TOP Codes of 0835.XX (Physical Education) or 1008.XX (Dance) is imperative. If a college chooses to offer these courses, they may not include the courses in its noncredit attendance calculations for the Apportionment Attendance Reports (CCFS-320) submitted to the Chancellor's Office.

According to Title 5, § 51006, each governing board of a community college district is required to adopt a policy or resolution stating "[t]he policy of this district is that, unless specifically exempted by statute or regulation, every course, course section, or class, reported for state aid, wherever offered and maintained by the district, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to section 55003 of division 6 of title 5 of the California Code of Regulations." This policy must be available to students. It "shall be published in the official catalog, schedule of classes, and addenda to the schedule of classes for which full-time equivalent student (FTES) is reported for state apportionment." Additionally, "a copy of the statement shall also be filed with the Chancellor."

Title 5, § 58051.5(a), states "No community college district may claim for purposes of state apportionment any classes: …(3) if such classes are not located in facilities clearly identified

in such a manner, and established by appropriate procedures, to ensure that attendance in such classes is open to the general public, except that students may be required to meet prerequisites which have been established pursuant to sections 55002 and 55003."

Noncredit and FTES and Computation of Enrollment
Attendance reporting procedures for noncredit courses are defined in Title 5, § 58007:

> *Contact hours of enrollment in noncredit courses, except for noncredit courses using the alternative attendance accounting procedure described in Title 5, § 58003.1(f)(2), shall be based upon the count of students present at each course meeting. Full-time equivalent students in noncredit courses shall be computed by dividing the sum of contact hours of enrollment by 525, except for noncredit courses using the alternative attendance accounting procedure described in Title 5, § 58003.1(f)(2). Nonresidents may be claimed for purposes of calculating full-time equivalent students only if they are living in California during the period of attendance and are otherwise eligible for such purposes as provided in this chapter.*

Noncredit Distance Education
Pursuant to Title 5, §§ 55200-55204, and 58003.1(f)(2), noncredit courses may be offered via distance education. Title 5, §§ 55200-55204, specifies that course quality standards apply to distance education in the same manner as for regular classroom courses, and that each course delivered via distance education must be separately approved as such through local curriculum approval processes. In addition, the regulations require regular effective contact between instructors and students. Title 5, § 58003.1(f)(2), specifies the attendance accounting method for noncredit courses offered via distance education.

Title 5, § 55206 states that, "If any portion of the instruction in a new or existing course is to be provided through distance education, an addendum to the official course outline of record shall be required." An addendum is an item of additional material, typically omissions, that are added at the end of a document. If a college's COR includes the required information, then an addendum would not be needed.

Noncredit Apprenticeship Courses
Apprenticeships are regulated in multiple sections of state regulations and code, including Title 5, § 55250.5 and Labor Code sections 3070-3098. These regulations define an apprenticeship as preparation for any profession, trade, or craft that can be learned through a combination of supervised on-the-job training and off-the-job formal education. The California Division of Apprenticeship Standards (DAS) within the California Department of Industrial Relations and the Chancellor's Office of the California Community Colleges share responsibility for the approval of noncredit apprenticeship programs. This shared responsibility has created a partnership for developing apprenticeship programs that includes the community college and the employer, also known as the program sponsor.

The DAS approves matters dealing with on-the-job instruction and maintains the standards. Both the California Apprenticeship Law and the annual California Budget Act refer to the off-

the-job formal education as related and supplemental instruction (RSI). Providing RSI is the job of the community colleges, adult schools, and regional occupational program centers. In addition, Labor Code section 3074 states that apprenticeship RSI shall be the responsibility of and be provided by state and local boards in charge of CTE in partnership with the program sponsor, who is normally the employer. The noncredit programs or courses must be chaptered by the Chancellor's Office for both curriculum and RSI funding (note: CDCP in the short-term vocational instructional domain requires Chancellor's Office approval).

Required documentation must be signed by the Chief of the DAS (or designee) to indicate that the apprenticeship has been approved, including the specific campus approved for the RSI, apprenticeship title, file number, and sponsor contact information. Justification of the need for any new CTE programs, including apprenticeships, is specifically required through a job market study (LMI), pursuant to Education Code § 78015.

The Chancellor's Office has delegated authority to the Apprenticeship Program Coordinator, who provides support to the college and the program sponsor throughout the development and implementation of an apprenticeship program. The Vice Chancellor of Educational Services (or designee) reviews the programs and courses offered by the community college using criteria that represent the standards of good practice established in the field of curriculum design.

Apprenticeship proposals require additional supporting documentation including a California Division of Apprenticeship Standards (DAS) Approval Letter.

Standards for Open Entry/Open Exit Noncredit Courses

Open entry/open exit courses are defined in Title 5, § 58164 as credit or noncredit courses in which students may enroll at different times and complete at various times or at varying paces within a defined period, such as a semester or quarter.

When an open entry/open exit course provides supplemental learning assistance (pursuant to CCR, Title 5, § 58172) in support of another course or courses, the COR for the supplemental open entry/open exit course must identify the course or courses it supports, as well as the specific learning objectives the student is to pursue. Determination of student contact hours must be based on the maximum number of hours that discipline faculty and the curriculum committee consider reasonably necessary to achieve the learning objectives of the primary course or courses being supplemented. Thus, the supplemental COR must be prepared in light of the primary course objectives, but the hours for the supplemental COR will then be based on the objectives and related assignments specified in the supplemental COR.

Noncredit Supplemental Learning Assistance and Tutoring

Colleges may claim apportionment for providing supplemental learning assistance and tutoring to students seeking additional help in other courses when offered in accordance with applicable regulations.

Refer to the section in this Handbook titled, Other Topics and Standards in Noncredit Courses for specific guidelines on tutoring and supplemental learning assistance. In addition to the ten eligible areas, Title 5, §§ 58168-58172 authorize community colleges

to claim apportionment for supervised tutoring and learning assistance under noncredit. Apportionment for supplemental learning assistance may be claimed for credit supplemental courses in support of primary/parent credit courses, or for noncredit supplemental courses (in any of the ten noncredit eligible areas outlined in Ed. Code, § 84757) in support of primary/parent noncredit courses. Only in limited circumstances, such as ESL and basic skills, may colleges offer noncredit supplemental learning assistance courses in support of credit courses. Also, in occupational areas, colleges may establish supplemental noncredit short-term vocational courses in support of credit occupational courses.

Supplemental Learning Assistance

Supplemental learning assistance is defined as assistance that is offered in learning labs or similar venues and is linked to a primary/parent course. The supplemental course is designed to further students' ability to succeed in the "primary" or "parent" course and the course outline of record identifies the parent course with which it is linked. Adhering to the general provisions of Title 5, §§ 58172, 58164, 58009, 58050, and 59402 will help to ensure compliance with applicable regulatory requirements.

Apportionment for supplemental learning assistance may be claimed for credit supplemental courses in support of primary/parent credit courses, or for noncredit supplemental courses, in any of the nine noncredit eligible areas outlined in Education Code § 84757, in support of primary/parent noncredit courses.

Only in limited circumstances, such as English as a Second Language (ESL) and basic skills, may colleges offer noncredit supplemental learning assistance courses in support of credit courses. In occupational areas, colleges may establish supplemental noncredit short-term vocational courses in support of credit occupational courses.

A supplemental course needs to be approvable on its own merit and, at the same time, address skills and/or concepts covered in the primary/parent courses that it supports. In order to be approved on its own merit, noncredit short-term vocational courses (one of the noncredit categories eligible for apportionment) need to prepare students for employment. Refer to the section above for standards on open entry/open exit noncredit courses.

Apportionment may not be claimed for optional attendance at artistic and cultural presentations or events or for using college/district facilities, equipment or resources that are not related to instructional learning objectives and competencies as outlined in course outline of record. There must be instruction that involves objectives and competencies that are described in an approved course outline of record.

Tutoring

Tutoring, when provided by a college, shall be considered a method of instruction that involves a student tutor who has been successful in a particular subject or discipline, or who has demonstrated a particular skill, and who has received specific training in tutoring methods and who assists one or more students in need of special supplemental instruction in the subject or skill. Student attendance in tutoring is eligible for apportionment only in a noncredit course offered under the provisions of Education Code § 84757(a)(2), basic skills. (CCR Title 5, § 58168). Title 5, § 58170 describes the conditions for claiming apportionment for tutoring.

Apportionment may be claimed for individual student tutoring only if all the following conditions are met: (CCR Title 5, § 58170)

(a) The individual student tutoring is conducted through a designated learning center.

(b) The designated learning center is supervised by a person who meets the minimum qualifications prescribed by Title 5, § 53415.

(c) All tutors successfully complete instruction in tutoring methods and the use of appropriate written and mediated instructional materials, including supervised practice tutoring. This requirement may be waived by the chief instructional or student services officer on the basis of advanced degrees or equivalent training. Academic credit and apportionment for coursework in tutoring methods for purposes of this section shall be limited to two semester- or three quarter-units of credit, or 96 noncredit hours. All tutors shall be approved by a faculty member from the discipline or disciplines in which the student will tutor.

(d) All students receiving individual tutoring have enrolled in a noncredit course carrying Taxonomy of Programs number 4930.09, which is entitled "Supervised Tutoring."

(e) Students enroll in the Supervised Tutoring course, through registration procedures established pursuant to Title § 58108, after referral by a counselor or an instructor on the basis of an identified learning need.

(f) An attendance accounting method is established which accurately and rigorously monitors positive attendance.

(g) Student tutors may be remunerated but may not be granted academic credit for tutoring beyond that stipulated in (c) above. (h) The district shall not claim state apportionment for tutoring services for which it is being paid from state categorical funds.

For further guidelines regarding noncredit tutoring see the "California Community Colleges Supplemental Learning Assistance and Tutoring Regulations and Guidelines," located on the California Community Colleges Chancellor's Office website under the Educational Services and Support webpage.

SECTION 3: NONCREDIT PROGRAM CRITERIA AND STANDARDS

This section provides an overview of the standards for all noncredit programs and is organized as follows:

- Definitions of Noncredit Program and Award Types

- Noncredit Program Approval

- Noncredit Career Development and College Preparation

- Adult High School Diploma

- Noncredit Apprenticeship Programs

- Locally Approved Programs

Definitions of Noncredit Program and Award Types

An education program is defined in Title 5, § 55000(m), as "… an organized sequence of courses leading to a defined objective, a degree, a certificate, a diploma, a license, or transfer to another institution of higher education." All noncredit programs that receive state funding require Chancellor's Office chaptering (note: CDCP in the short-term vocational instructional domain requires Chancellor's Office review before chaptering).

The Board of Governors, by statute, has statewide responsibility for oversite on all new instructional programs in community colleges. The authority is contained in Education Code § 70901. Title 5, § 55150 – Approval of Noncredit Courses and Programs, sets forth the basic requirements for chaptering of a noncredit instructional program.

Approval of a noncredit educational program is effective until either:

- The noncredit educational program or implementation of the noncredit educational program is discontinued or modified in any substantial way; or

- The Chancellor evaluates the noncredit educational program after chaptering on the basis of factors listed in Title 5, § 55151 or 55154, as applicable. If the Chancellor determines that the noncredit educational program should no longer be offered based on the evaluation, the Chancellor may terminate the approval and determine the effective date of termination.

Noncredit Program Approval

There are five criteria used by the Chancellor's Office to chapter approve noncredit programs and courses. The five criteria were derived from statute, regulation, intersegmental agreements, guidelines provided by transfer institutions and industry, recommendations of accrediting agencies, and the standards of good practice established in the field of curriculum design.

These criteria are as follows:

- Appropriateness to Mission

- Need

- Curriculum Standards

- Adequate Resources

- Compliance

Full explanations of these criteria are provided in Part 1 of this Handbook.

The types of noncredit educational programs that must be submitted to the Chancellor's Office for chaptering include:

- Career Development and College Preparation (CDCP) Programs (note: CDCP certificate programs in the short-term vocational instructional domain require Chancellor's Office review before chaptering)

  ○ Certificate of Competency—a certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution

  ○ Certificate of Completion—a certificate leading to improved employability or job opportunities

- Adult High School Diploma

- Noncredit Apprenticeship Programs

Noncredit Career Development and College Preparation

Programs and required courses classified as noncredit Career Development and College Preparation (CDCP) prepare students for employment or to be successful in college level-credit coursework. In accordance with Title 5, § 55151 colleges may offer an approved sequence of noncredit courses that culminate in one of the following awards: Certificate of Competency, Certificate of Completion, or Adult High School Diploma. Once a program is chaptered approved, the noncredit courses that comprise a CDCP program will be eligible for enhanced funding pursuant to Education Code §§ 84750.5 and 84760.5. CDCP certificates can be awarded in the following four noncredit categories: elementary and secondary basic skills, workforce preparation, short-term vocational with high employment potential program, English as a second language and vocational English as a second language (see Title 5, § 55151). CDCP in the short-term vocational instructional domain requires Chancellor's Office review before chaptering.

CDCP funding for courses that are part of a CDCP program cannot be received until the program is chaptered.

For program proposals in the CDCP category of short-term vocational with high employment potential, colleges must provide evidence of high employment potential in one of two ways. They can identify the area of instruction on the list of occupational titles with high employment potential (http://www.labormarketinfo.edd.ca.gov) or attach another data source containing current labor market or job availability data with an explanation of how the data is verified. Unlike credit CTE programs, proposals do not require advisory committee nor regional consortium recommendation.

CDCP programs must be approved in accordance with Title 5, §§ 55002 and 55100. Upon chaptering, a program is assigned a unique Program Control Number. For more information regarding MIS data elements, refer to the Data Element Dictionary (DED) available on the Chancellor's Office website.

Table 13 — Noncredit Coding Guide for CDCP Enhanced Funding

CDCP Category of Certificate	CB24: Course Program Status	CB22: Noncredit Category	CB11: Course Classification Status
Workforce Preparation	1 – Program Applicable	J – Workforce Preparation	J – Workforce Preparation
ESL Elementary and Secondary Basic Skills Short-term Vocational with High Employment Potential	1 – Program Applicable	A - ESL C - Elementary and Secondary Basic Skills I - Short-term Vocational with High Employment Potential	K – Other Noncredit Enhanced Funding

Note: refer to the Noncredit Categories section of this Handbook for additional information on the noncredit instructional categories and Course Basic ("CB") fields listed in the table above.

Certificate of Competency

Pursuant to Title 5, § 55151, students completing noncredit courses in a prescribed pathway, chaptered by the Chancellor's Office, that prepares students to take non-degree-applicable credit coursework, including basic skills and English as a second language, or to take degree-applicable credit coursework leading to completion of a credit certificate, an associate of arts degree, or transfer to a baccalaureate institution, a Certificate of Competency may be awarded. A noncredit Certificate of Competency means a document confirming that a student enrolled in a noncredit educational program of noncredit courses has demonstrated achievement in a set of competencies that prepares students to progress in a career path or to undertake degree-applicable or non-degree-applicable credit courses (CCR, Title 5, §55151(i)). The Certificate of Competency must include the name of the certificate and the date awarded, be identified by a TOP Code number and program discipline, and list the relevant competencies achieved by the student.

Certificate of Completion

Pursuant to Title 5, § 55151, students completing noncredit courses in a prescribed pathway, chaptered by the Chancellor's Office, leading to improved employability or job opportunities, a Certificate of Completion may be awarded. A noncredit Certificate of Completion means a document confirming that a student has completed a noncredit educational program of noncredit courses that prepares students to progress in a career path or to take degree-applicable credit courses (CCR, Title 5 §55151(h)). The Certificate of Completion must include the name of the certificate and the date awarded, be identified by a TOP Code number and program discipline, identify the goal of the program, and list the courses completed by the student.

Criteria for Approval

The background and criteria of some of the required elements for noncredit program approval are briefly discussed below. All CDCP certificate programs in the short-term vocational instructional domain require Chancellor's Office review before chaptering.

The submission must include all required documentation, including:

- Narrative

- Course Outlines of Record (COR) for all courses

- Labor Market Information (LMI) for short-term vocational with high employment potential only

Narrative

All new and modified noncredit certificates must include a narrative that addresses:

- Program Goals and Objectives - must address a valid transfer preparation, workforce preparation, basic skills, civic education, or lifelong learning purpose. The stated goals and objectives of the program must be consistent with the mission of the community colleges as established by the Legislature in Education Code section 66010.4. Often, colleges will include the program level Student Learning Outcomes (SLOs) in this section that identify the program's goals and objectives. Select an appropriate program goal of either: CTE, for short-term vocational or local, for all other certificates. Note: If the certificate program goal selected is "Career Technical Education (CTE)," then the statement must include the main competencies students will have achieved that are required for a specific occupation. The statement must, at a minimum, clearly indicate the specific occupation(s) or field(s) the program will prepare students to enter and the basic occupational competencies students will acquire

- Catalog Description – includes program requirements, prerequisite skills or enrollment limitations, student learning outcomes, and information relevant to program goal

- Program Requirements – includes course requirements and sequencing that reflect program goals. The courses specified must coincide with the courses associated with the certificate proposal record. Within the program requirements table, specify the total student contact hours of each course

- Master Planning – describe how the certificate program fits into the mission, curriculum, and master planning of the college and higher education in California

Labor Market Information (LMI)

All new and modified noncredit CDCP certificates in the short-term vocational instructional domain must provide Labor Market Information that is less than two years old.

Adult High School Diploma

Pursuant to Title 5, § 55154 colleges may offer a sequence of noncredit courses that culminate in an Adult High School Diploma (AHSD). An AHSD is composed of a sequence of noncredit courses leading to a high school diploma that is awarded by the community college district or jointly by the district and a high school in accordance with Title 5, § 55154. The course content standards should meet or exceed the standards for high school curriculum established by the California State Board of Education. A high school diploma is granted when the student has completed the equivalent of at least 160 high school credits, including the specified minimum number of credits in the five general subject areas of English, mathematics, natural sciences, social and behavioral science, and humanities. In addition, at least 20 of the total 160 required high school credits must be completed in residence at the community college granting the diploma. This specialized program requires additional justification not required for other noncredit programs. Note: A noncredit course in any college awarding 10 high school credits must be designed to require a minimum of 144 hours of lecture, study or laboratory work (CCR, Title 5, § 55154). Each course shall be of sufficient duration to permit a student to master the content of the course as specified in the California State Board of Education's Course Content Standards (CCR, Title 5, § 55154).

Criteria for Approval

The background and criteria of some of the required elements are briefly discussed below.

The submission must include all required documentation, including:

- Narrative - describing the development of the AHSD program (see narrative sub-components below; the narrative subcomponents are pursuant to Title 5, § 55154)

- Course Outlines of Record (COR)

Narrative Components

- Demonstration of Need: Provide quantitative and qualitative data demonstrating the need for the proposed Adult High School Diploma program in the college. For example, discuss the number of students that have not completed high school in the service area (dropout rate); address the total number of students that have not passed the California High School Exit Exam (CAHSEE) in the service area; and/or demonstrate the requirement of a high school diploma for employment in the industries in the service areas. Describe how the college has verified that this program will not have an adverse impact on similar programs and options at neighboring colleges.

- Catalog Description: Provide a description of the program that will be placed in the college's catalog and schedule of classes. This description should covey the program's goals, objectives, and expected outcomes.

- Program Organization: Describe how the program will be consistent with the mission of the college and the relationship to other programs that complement or link to the AHSD program. Additionally, provide an organizational chart consisting of the AHSD program faculty and staff.

- Ongoing Faculty/Staff Efforts: Describe in detail how the college will fund on-going faculty/staff needed in order to sustain the program.

- Professional Development for Faculty and Staff: Describe the professional development activities that will be available for faculty teaching in the program to ensure that faculty has the necessary knowledge and skills to facilitate student success and completion of the AHSD program.

- Student Services: Describe the support services provided to students to assist them in completing the program (e.g., counseling, orientation, student follow-up, and monitoring).

- Student Assessment: Provide a description of student assessment procedures for academic placement in the program. Describe the method the college will use in evaluating student progress and the tools the college will utilize to determine student progress towards the program's objectives

- Instructional Support Services for Students: Identify and describe the instructional support services for students, such as tutoring, supplemental instruction, and other instructional support services such as those provided in the learning resource center.

- Facilities: Describe the facilities where the program will be implemented. If facilities are not currently available, describe the district's master plan for providing appropriate facilities for this program.

- Curriculum Alternatives: Provide a description of requirements or conditions by which a student can obtain high school credit by examination or by successfully completing college degree-applicable or non-degree-applicable credit course work and any alternative means for students to complete the prescribed course of study. All alternative means must meet or exceed the standards for the high school curriculum established by the California State Board of Education. These can be found on the [California State Board of Education website](www.cde.ca.gov/be/st/ss/) (www.cde.ca.gov/be/st/ss/).

Noncredit Apprenticeship Programs

Apprenticeship noncredit offerings have some unique elements regarding curriculum approval and funding approval. All apprenticeship noncredit programs and courses must obtain Chancellor's Office approval for each college responsible for the offerings. The approval requirement specifically required by the annual Budget Act.

The apprenticeship curriculum offered by community colleges, adult schools, and regional occupational program centers is referred to as related and supplemental instruction (RSI) in the apprenticeship law and in the Budget Act. Apprenticeship RSI described in Education Code § 79144.

If a district intends to receive apprenticeship RSI funding, the Budget Act states that the program or courses must have the approval of the Chancellor's Office. Thus, a district must

receive from the Chancellor's Office both curriculum approval and RSI funding approval. For both of these approvals, the application must contain documentation that the Division of Apprenticeship Standards (DAS) within the Department of Industrial Relations has approved the apprenticeship. The approval documentation must list the specific campus approved for the RSI, and must be signed by the chief of the DAS or designee. An employer who has an apprenticeship RSI program at an adult school or regional occupational program center can apply to move the program to a community college.

Apprenticeship programs involve long-range planning to provide adequate funding; therefore, it is important for the community college district to notify the Chancellor's Office apprenticeship coordinator as soon as the district decides to give the employer or program sponsor a letter of intent to be the Local Educational Agency (LEA). This notification is to be used when working with a new apprenticeship program or applying for the transfer of an existing program from another community college, adult school, or regional occupational program center.

Locally Approved Programs

Colleges may develop locally approved noncredit programs, but they may not title them as a certificate of completion, certificate of competency, adult high school diploma program, or a certificate of achievement (credit) unless they meet and comply with applicable policy standards and criteria and are officially chaptered by the Chancellor's Office. A noncredit certificate of completion and certificate of competency that is not chaptered by the Chancellor's Office will not receive CDCP enhanced funding.

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