

Intensity

Title 5, section 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, sections 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.

Prerequisites and Corequisites

Title 5, section 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, section 55003.

D. Standards for Credit Hour Calculations

Credit hour calculations are governed by the standards in title 5, sections 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, sections 55002(a)(2)(B)-(b)(2)(B) grant local 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, section 55256.5.

1. Standard Formula

The standard formula for credit hour calculations applies to the majority of courses and course types and is derived from title 5, section 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, section 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, sections 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 outside-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 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 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-weeks on the semester system and $11\frac{2}{3}$ -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, section 55002.5 to award a unit of credit.

Calculation Categories and Outside-of-class Hours

As outlined in the sample table on page 46, 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 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 COR, the calculation of credit hours must include the expected hours of student work outside-of-class as described 46. 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.

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 the Submission and Approval Guidelines.

2. Fractional Unit Awards and Minimum Thresholds

Title 5, section 55002.5(c) and (d) govern the awarding of fractional units of credit. Specifically, section (c) requires the college to award units of credit in a minimum of .5 increments; whereas section (d) allows colleges to award units in increments smaller than .5 if permitted 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 = .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.

3. **Cooperative Work Experience Formula**

Credit hour calculations for work experience are governed by the regulations set forth in title 5, section 55256.5. In title 5, section 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.

4. **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 sections 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 section 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.

5. **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 for local governing boards under California Code of Regulations, title 5, section 55002 to establish the relationship between units and hours for the local curriculum development and approval process.

6. Open Entry/Open Exit Course Credit Calculation

Courses approved by the curriculum committee as meeting the definitions in title 5, section 58164, for open entry/open exit courses are required by title 5, section 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.

E. Other Course Types and Standards

1. Standards for Conditions of Enrollment

Standards for establishing and monitoring Prerequisites, Corequisites, and Advisories on Recommended Preparation are outlined in title 5, section 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 local 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 is 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.

- Local: All other AA and AS degrees and certificates, 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) are strongly recommended for any Science, Technology, Engineering, or Mathematics (STEM) field and CTE programs
- Associate of Arts (AA) are 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

B. General Associate Degree Standards

The general standards for the Associate degree are set forth in title 5, section 55063 which specifies the following requirements:

- At least 18 semester units or 27 quarter units defining a major or area of emphasis and aligned with the TOP Code identified for the degree
- 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 or area of emphasis can be in a single discipline or related disciplines, 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, section 55061. The remaining units may be used for local graduation requirements or electives, as permitted for the degree type.

C. Standards for Writing and Computation 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 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 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 achieving a score on an assessment 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.

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.

II. 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 section 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 section 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