



Academic Senate
for California Community Colleges

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CREDIT HOUR CALCULATIONS

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Recent changes to title 5 regulations re:
credit hour calculations

Standards and guidance on application
of new regulations

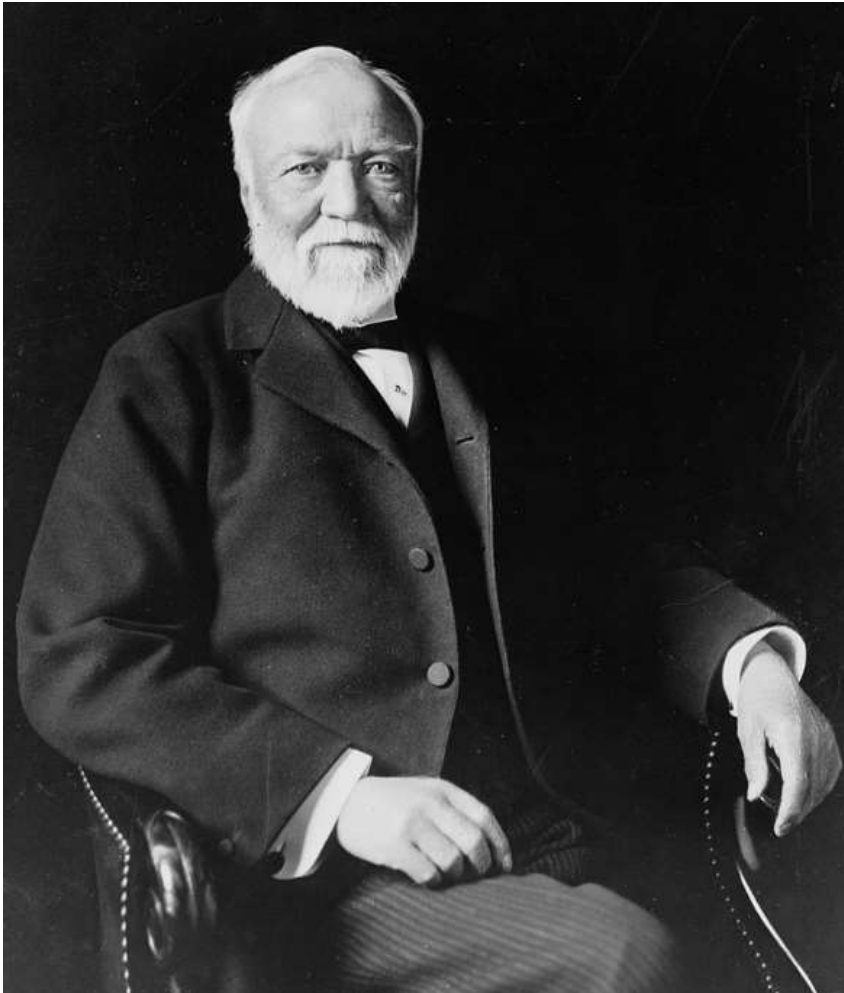
Guidance on local policy

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Credit Hour Resources



Background on the Credit Hour

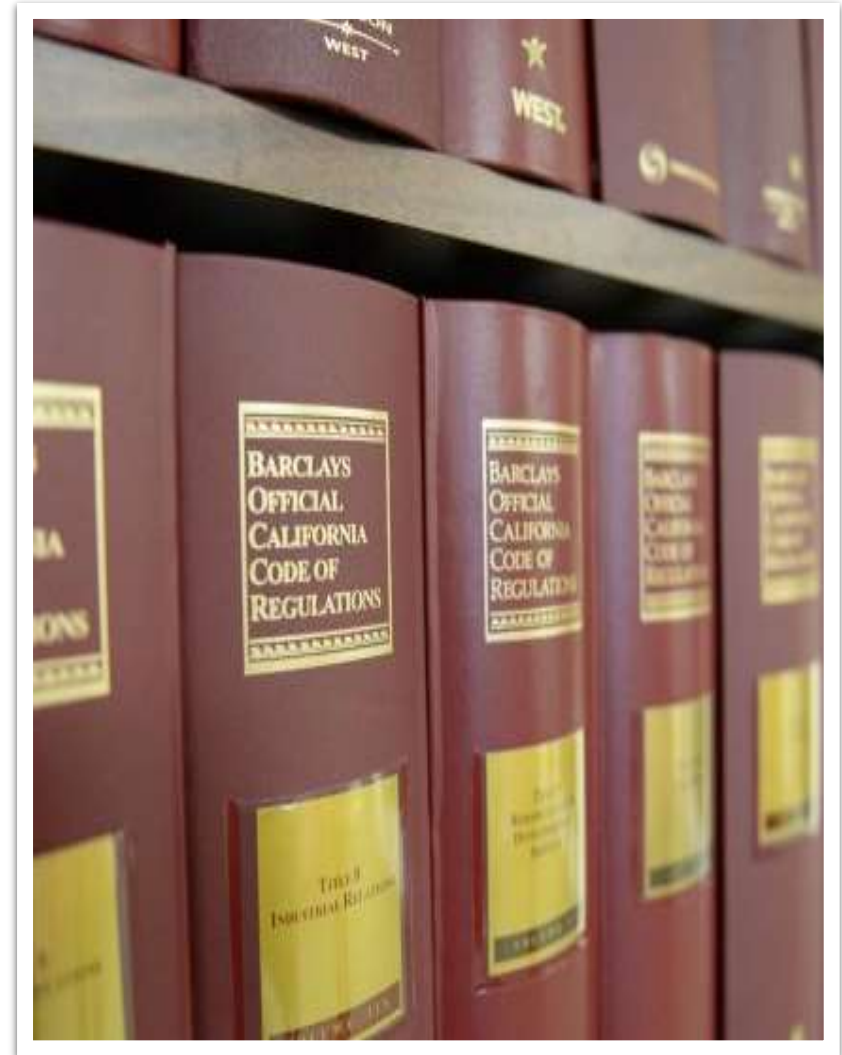


- Carnegie Unit? Not in Higher Education; CU a measure of progress in secondary education.
- Standard unit or “student hour” in part a response to the shift towards modular, elective curriculum and student mobility in the late 19th century.
- Additional pressure to standardize measurements of learning among schools.
- Seat time vs. summative assessments of student learning.
- Defined by common practices, not by law.
- Decried by many as an intrusion of industrialization and business into higher education.

I. REVISED TITLE 5 REGULATIONS

Revisions to CCR, title 5 §55002.5

- Removed reference to lecture and lab, replaced with “total student work” and “outside-of-class hours.”
- Removed reference to lecture and lab, replaced with “total student work” and “outside-of-class hours.”
- Inserted reference to regulations for cooperative work experience.
- Inserted reference to federal regulations for clock hour programs.
- Replaced prior language on incremental awards that required half-unit increments and permitted smaller increments. Permissive rather than prescriptive.
- Inserted new requirement for local policy specifying local standards in compliance with this section and federal regulations.



California Code of Regulations, full text

§ 55002.5. Credit Hour Definition.

- (a) One credit hour of community college work (one unit of credit) shall require a minimum of 48 semester hours of total student work or 33 quarter hours of total student work, which may include inside and/or outside-of-class hours.
- (b) A course requiring 96 hours or more of total student work at colleges operating on the semester system or 66 hours or more of total student work at colleges operating on the quarter system shall provide at least 2 units of credit.
- (c) Cooperative work experience courses defined in section 55252 shall adhere to the formula for credit hour calculations identified in section 55256.5.
- (d) For programs designated by the governing board as clock hour programs, units of credit shall be awarded in a manner consistent with the provisions of 34 Code of Federal Regulations part 600.2.
- (e) Credit hours for all courses may be awarded in increments of one unit or less.
- (f) The governing board of each community college district shall establish policy, consistent with the provisions of this section, defining the standards for credit hour calculations. District policy shall specify the credit hour calculation method for all academic activities, expected ratios of in-class to outside-of-class hours for each type of academic activity, standards for incremental award of credit, standard term length, calculation methods for short term and extended term courses, and provisions for monitoring compliance with state and federal regulations related to credit hour calculations.

Principles Behind the Revisions

- Less prescriptive, relying on careful development and consistent application of local policy
- Tie state regulations to new federal requirements.
- Update language and standards for consistency with federal regulations.
- Bring CCC in line with other systems of higher education
- Specific guidance on the application of these regulations is included in the 6th edition of the PCAH.

II. APPLYING THE NEW REGULATIONS: CALCULATIONS

Essential Terminology

Total Contact Hours

- Sum of all contact hours for the course in all calculations categories. These are the hours the student is under the direct supervision of an instructor and are used to determine FTES and apportionment.

Outside-of-class Hours

- Hours students are expected to engage in course work outside of the classroom.

Hours of Total Student Work

- Term used in the revised regulations to describe the sum of contact hours and outside-of-class (homework) hours.

Hours-per-unit Divisor

- Total student learning hours (contact + outside) for which the college awards one unit of credit.

Standard Formula

Units of Credit =

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

Round the result down to the nearest increment of credit awarded by the college. Colleges may award units of credit in increments smaller than .5. Courses under .5 units may use other increments, e.g. .1, .125, .15, .25, etc. No zero-unit courses are permitted.

Cooperative Work Experience

- 75 hours (50) of paid work experience = 1 unit
- 60 hours (40) of un-paid work experience = 1 unit
- .5 unit increments are permissible (as of April 19, 2018)

These standards are referenced in §55002.5, but are housed in §55256.5

Clock Hour Programs

Defined in federal regulations USDE 34 CFR §668.8(k)(2)(i)(A) and 668.8(l).

37.5 clock hours = 1 unit of credit

Because...

- 1 hour = 50 minutes for credit hour calculations
- 1 unit of credit = minimum of 45, 50-minute hours
- $45 \times 50 = 2250$ minutes
- $2250 / 60 = 37.5$

Newer regulation and definition that is just now being reviewed under 2014 ACCJC Standards (II.A.9).

Talk to your Financial Aid Officer to determine if any of your programs are reported to the Department of Education as “clock hour” programs. This information is reported on the PPA submitted to the department of education.

Additional Information on Clock Hour Programs

When Must A Program Be Measured In Clock Hours?

- Regulations require clock hour measurement for Title IV if:
 1. School's accrediting agency requires it;
 2. School must measure student progress in clock hours when receiving federal or state approval or licensure to offer the program; OR
 3. Completion of clock hours is a requirement for graduates to apply for licensure or the authorization to practice the occupation that the student is intending to practice

III. EXPLANATION OF STANDARDS

Typical Ratios

The standard formula includes typical ratios for contact- to homework hours that are not specified in law, but are drawn from standard practices in higher education. The three typical ratios, expressed in weekly hours, are as follows:

Academic Activity	Weekly Contact Hours	Weekly 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, Clinical, and Similar)	3	0

Hours-per-unit Divisor

Total hours of student (contact + outside) for which the college awards one unit of credit, based on the length of the primary term.

- 16 weeks = 48 hours
 - 17 weeks = 51 hours
 - 17.5 weeks = 52.5 hours
 - 18 weeks = 54 hours
-
- Minimum of 48, maximum of 54. (Min 33, max 36 quarter)
 - Can also be expressed as range, e.g. 48 – 54.
 - Divisor and dividend in local calculations should match, e.g. if college bases the dividend on a 51 = 1 unit model, the divisor should be 51.
 - 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.

Outside-of-Class Hours

Hours students are expected to engage in course work outside of the classroom.

- New regulations require these hours to be included on the COR (title 5 §55002(a)(2)(B) and (b)(2)(B))
- As a matter of standard practice, lecture and related course formats typically assume 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 required for lecture, with the ratio of in-class to outside-of-class work prorated appropriately for the academic activity.

Table 1: Typical Ratios for Outside-of-class Hours

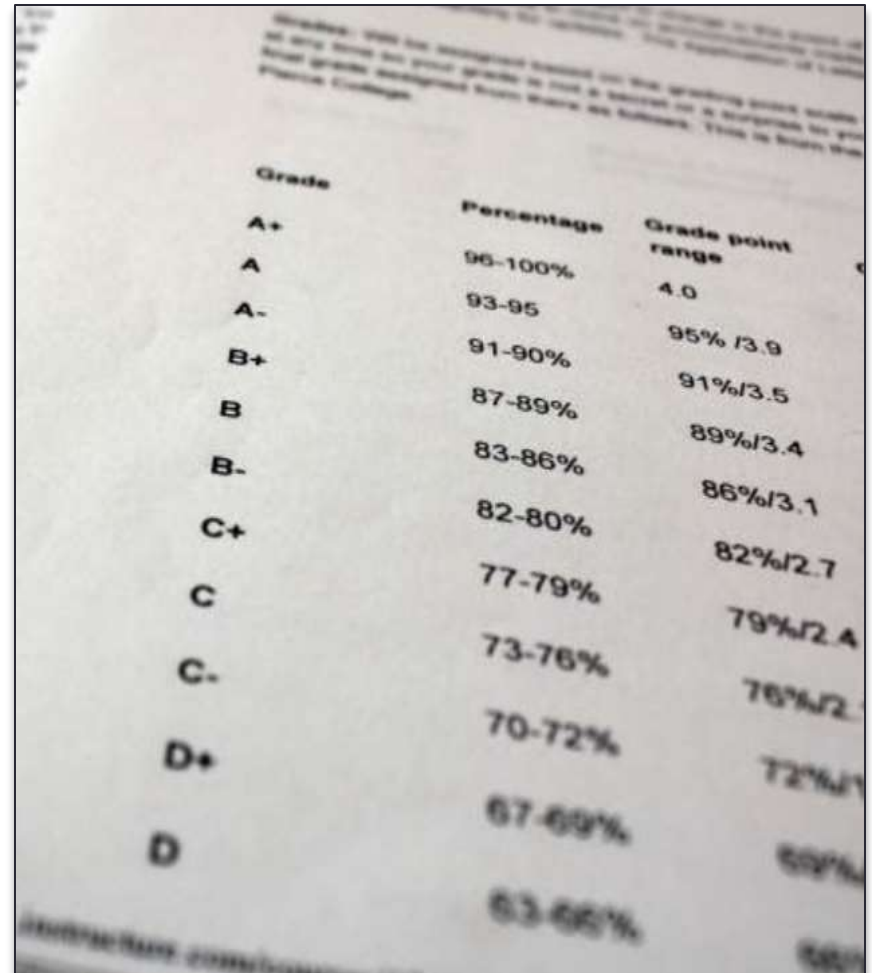
Category	Contact	Outside-of-class
Lecture (Lecture, discussion, seminar, and related work)	1	2
Activity (Activity, lab w/homework, studio, and similar)	2	1
Laboratory (Traditional science lab, clinical, and similar)	3	0

Fractional Unit Awards

Title 5 allows colleges to award credit in increments of less than one unit.

- Each unit increment represents a minimum threshold within a range.
- The next increment of credit is only awarded once the student passes the minimum number of hours for that increment.
- May award in increments of .5 or smaller. Under .5, districts may use smaller increments even if they are not used above .5, e.g. .1, .125, .25, etc.

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.



Grade	Percentage	Grade point range
A+	96-100%	4.0
A	93-95	95%/3.9
A-	91-90%	91%/3.5
B+	87-89%	89%/3.4
B	83-86%	86%/3.1
B-	82-80%	82%/2.7
C+	77-79%	79%/2.4
C	73-76%	76%/2.1
C-	70-72%	72%/1.8
D+	67-69%	69%/1.5
D	63-66%	66%/1.2

Nursing Programs

Governed by regulations in title 16 §1426

(g) The course of instruction shall be presented in semester or quarter units or the equivalent under the following formula:

- (1) One (1) hour of instruction in theory each week throughout a semester or quarter equals one (1) unit.
- (2) Three (3) hours of clinical practice each week throughout a semester or quarter equals one (1) unit. With the exception of an initial nursing course that teaches basic nursing skills in a skills lab, 75% of clinical hours in a course must be in direct patient care in an area specified in section 1426(d) in a board-approved clinical setting.

Other Academic Activities

These variations are not covered in CCC regs and have created some difficulties for colleges in our system:

- Allied health (non-nursing), e.g. Directed Clinical Practices
- Intercollegiate Athletics
- Music performance
- Theater production
- Distance education
- Internships
- Field experiences

Our other systems of higher ed in California and elsewhere use a different calculations for these areas, instead of the standard formula, frequently awarding far fewer units of credit than a similar class in the CCC system. Prevented by §55002.5(b), which requires the award of a second unit of credit

IV. LOCAL IMPLEMENTATION

Local Governing Board Policy

Now REQUIRED by new title 5 regulations - §55002.5(f)

District policy shall specify:

- the credit hour calculation method for all academic activities (lecture, activity, lab, clinical, discussion, studio, work experience, etc.)
- expected ratios of in-class to **outside-of class hours** for each type of academic activity
- standards for incremental award of credit
- standard term length (number used to determine divisor in calculation)
- calculation methods for short term and extended term courses
- provisions for monitoring compliance with state and federal regulations related to credit hour calculations

CCLC - Recommends policy to be included in BP / AP 4020

V. SAMPLE CALCULATIONS AND RESOURCES

	Contact Hours						
Example Course Type <i>All examples use 54 hours = 1 unit</i>	Lecture Hours	Activity	Laboratory	Other	Outside-of-class Hours	Total Student Learning Hours	Units
Traditional Lecture Course #1	54	0	0	0	108	162	3
Traditional Lecture Course #2	72	0	0	0	144	216	4
Traditional Lab Course #1	0	0	108	0	0	108	2
Traditional Lab Course #2	0	0	162	0	0	162	3
Lab Course #1	0	0	175	0	0	175	3
Lab Course #2	0	0	980	0	0	980	18
Lab Course #3	0	0	40	0	0	40	0.5
Activity Course #2	0	72	0	0	36	108	2
Activity Course #3	0	108	0	0	54	162	3
Lecture / Laboratory Course #1	54	0	54	0	108	216	4
Lecture / Laboratory Course #2	36	0	72	0	72	180	3
Lecture / Laboratory Course #3	27	0	81	0	54	162	3
Lecture / Activity Course #1	36	36	0	0	90	162	3
Lecture / Laboratory / TBA	27	0	54	18	54	162	3

Sample Calculations: Lecture

Lecture	48 = 1 unit		
Units	Contact Hours	Homework Hours	Total Student Learning Hours
0.5	8	16	24
1	16	32	48
1.5	24	48	72
2	32	64	96
2.5	40	80	120
3	48	96	144
3.5	56	112	168
4	64	128	192
4.5	72	144	216
5	80	160	240
5.5	88	176	264
6	96	192	288

54 = 1 unit		
Contact Hours	Homework Hours	Total Student Learning Hours
9	18	27
18	36	54
27	54	81
36	72	108
45	90	135
54	108	162
63	126	189
72	144	216
81	162	243
90	180	270
99	198	297
108	216	324

Sample Calculations: Activity or Lab with Homework

<i>Activity, Lab w/Homework</i>	48 = 1 unit		
Units	Contact Hours	Homework Hours	Total Student Learning Hours
0.5	16	8	24
1	32	16	48
1.5	48	24	72
2	64	32	96
2.5	80	40	120
3	96	48	144
3.5	112	56	168
4	128	64	192
4.5	144	72	216
5	160	80	240
5.5	176	88	264
6	192	96	288

54 = 1 unit		
Contact Hours	Homework Hours	Total Student Learning Hours
18	9	27
36	18	54
54	27	81
72	36	108
90	45	135
108	54	162
126	63	189
144	72	216
162	81	243
180	90	270
198	99	297
216	108	324

Sample Calculation: Lab, Activity, Clinical, etc. without homework.

Units	48 = 1 unit		Total Student Learning Hours
	Contact Hours	Homework Hours	
0.5	24	0	24
1	48	0	48
1.5	72	0	72
2	96	0	96
2.5	120	0	120
3	144	0	144
3.5	168	0	168
4	192	0	192
4.5	216	0	216
5	240	0	240
5.5	264	0	264
6	288	0	288

54 = 1 unit		Total Student Learning Hours
Contact Hours	Homework Hours	
27	0	27
54	0	54
81	0	81
108	0	108
135	0	135
162	0	162
189	0	189
216	0	216
243	0	243
270	0	270
297	0	297
324	0	324

Sample Calculation Table: for colleges that use 48 – 54 range

Lecture	48 - 54 = 1 unit		
Units	Contact Hours	Homework Hours	Total Student Learning Hours
0.50	8-9	16-18	24-27
1.00	16-18	32-36	48-54
1.50	24-27	48-54	72-81
2.00	32-36	64-72	96-108
2.50	40-45	80-90	120-135
3.00	48-54	96-108	144-162

Credit Hour Regulations

- **COR Requirements:** title 5 §§55002(a)(2)(B) and (b)(2)(B)
- **Credit Hour Definition and Policy:** title 5 §55002.5
- **Work Experience:** title 5 §55256.5
- **Open Entry / Open Exit:** title 5 §558164
- **Nursing Programs:** title 16 §1426
- **Independent Study:** title 5 §55232
- **Accreditation Standards:** 2014, ER 10, Standards II.A.9 and II.A.10
- **Federal Regulations**
 - 34 CFR 600.2
 - 34 CFR 668.8

Resources

- Westlaw website with text of title 5 §55002.5:

[https://govt.westlaw.com/calregs/Document/IA9719B60D48411DEBC02831C6D6C108E?viewType=FullText&originatioNContext=documenttoc&transitionType=CategoryPageItem&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Document/IA9719B60D48411DEBC02831C6D6C108E?viewType=FullText&originatioNContext=documenttoc&transitionType=CategoryPageItem&contextData=(sc.Default))

- Program and Course Approval Handbook, 6th Ed.

<http://extranet.cccco.edu/Divisions/AcademicAffairs/CurriculumandInstructionUnit.aspx>

- Text of federal regulations:

<https://www.ecfr.gov/cgi-bin/text-idx?rgn=div8&node=34:3.1.3.1.1.1.23.2>

- US Department of Education Q&A on credit hour

<https://www2.ed.gov/policy/highered/reg/hearulemaking/2009/credit.html>

- US Department of Education Presentation on Clock Hour Programs

<https://www2.ed.gov/offices/OSFAP/training/materials/clockhoursides.pdf>