

Hours to Units

A Primer for Curriculum Newbies



Topics

- I. What is a Unit of Academic Credit?
- II. The Basics: Relationship of Hours and Units in the CCCs
- III. Calculating Units
- IV. Examples of Hour to Unit Calculations
- V. Sneak Peak at Advanced Topics in Hour to Unit Calculations
- VI. Tips for New Chairs

Introduction

National and state standards for higher education require colleges to develop consistent standards for marking student progress, typically achieved through the awarding of units of academic credit that are tied to the number of hours a student spends learning, both in and out of the classroom.

Introduction

- ◆ Standards for the awarding of units of credit in California Community Colleges are governed by Title 5 of the California Code of Regulations.
- ◆ Local Curriculum Committees approve hour / unit configurations for every course in their college catalog through the curriculum review and approval process.
- ◆ Title 5 requires that every Course Outline of Record (COR) include the total hours of student learning and the unit value for the course, based on the scope and depth of the content, objectives, assignments, and methods of evaluation.
- ◆ Comment on Quarter Calculations

I. What is a Unit of Academic Credit?



Definitions

- ◆ A standardized, numeric expression of student work that is traditionally based on the hours a student spends learning, both inside and outside of the classroom.
- ◆ Typically, Hours of Learning = Units of Academic Credit.

Common Terms

- ◆ Standard Unit / Carnegie Unit
- ◆ Total Student Learning Hours
- ◆ Catalog Hours
- ◆ Academic Credit
- ◆ Term Length

The “Carnegie” Unit:

Colloquial term for the generally accepted standards related to academic credit awarded for study based on hours of student work.

- ◆ 3 hours of student work per week, for 16-18 week semester = 1 semester unit of credit.
- ◆ Broken up into generally accepted ratio of 1 hour in-class / 2 hours out-of-class for lecture, or 3 hours of in-class work for laboratory.
- ◆ Is a misnomer! The “Carnegie” name became associated with the “Standard Unit”, but the Foundation did not originate the concept of equating hours with numeric units.

II. The Basics

Relationship of Hours to Units in California
Community Colleges



The Basic Calculation

48 to 54 total student
learning hours

=

1 unit of academic credit.

The Basic Calculation

Why 48 – 54 Hours?

- ◆ Standard Unit based on three hours of work per week, over an entire term.
- ◆ $3 \text{ hours} \times 18 \text{ weeks} = 54$
- ◆ $3 \text{ hours} \times 16 \text{ weeks} = 48$
- ◆ 48 is the minimum required for 1 unit
- ◆ 54 is the CO recommended divisor to ensure accurate reporting of FTES.

The Basic Principles

- ◆ For Curriculum, calculations of units are based on total “student learning hours,” which includes all in-class and out-of-class work.
- ◆ Hours recorded on the Course Outline of Record (COR) represent the *maximum* potential hours for a course. Actual hours for a given section vary based on calendars and scheduling.
- ◆ Hour to unit calculations for CORs should be based on 18 week semesters, even when a local college uses a 15, 16, or 17-week calendar.
- ◆ Course Outlines of Record should record total hours for each instructional category and total student learning hours.

The Basic Regulatory Parameters

- ◆ 1 unit of Academic Credit must represent a minimum of 48 total hours of student work.
- ◆ Units must be awarded at .5 increments and may be awarded in smaller increments.
- ◆ Students *must* receive 2 units of credit when they complete 108 total student hours and *may* receive 2 units of credit when they complete 96 total student hours.
- ◆ 0 – unit courses are not permissible.

The Basic Regulations

Title 5 of the California Code of Regulations:

- ◆ §55002.5

The Program and Course Approval Handbook (PCAH)

- ◆ Incorporated into Title 5 regulations by reference.
(§55000.5)

- ◆ Fifth ed., pages 99-103

The Basic Course Categories

Three primary teaching modalities, each with differing hour to unit calculations:

- ◆ Lecture
- ◆ Lab
- ◆ Other (Clinical, Studio, Lecture/Lab)

The Basics: Total Student Learning Hours

All calculations for hours / units on the Course Outline of Record should be based on calculation of total hours, referred to in the PCAH as “total student learning hours.” These are inclusive of all in-class and out-of-class hours a student spends on learning in one class for an entire term. We do this because:

- ◆ Term lengths vary between schools, compressed calendars.
- ◆ To ease the calculation of hours p/week and units for Summer Sessions / Intersessions, Short Term Courses, and CTE courses that run more than 18 weeks.

III. Calculating Units



Calculating Units: The Governing Formula

To Calculate Units

(Total Lec Hrs + Total Lab Hrs + Total Hmwrk Hrs)

54*

(Round answer down to nearest .5)

**54 is used for this example based on the recommendation from the Chancellor's Office that local districts use an 18 week semester as the basis for calculating hour to unit ratios on Course Outlines of Record. Likewise, . . .*

Calculating Units: The Governing Formula

For Example:

◆ $(36 \text{ Lec} + 72 \text{ Lab} + 72 \text{ Hmwrk}) = 180$ total student hours

◆ $180 / 54 = 3.33$

◆ 3 units

**54 is used for this example based on the recommendation from the Chancellor's Office that local districts use an 18 week semester as the basis for calculating hour to unit ratios on Course Outlines of Record. For 18 weeks, 54=1 unit*

Calculating Units: Term Length

Term length varies district-to-district, and often program-to-program within districts. Most CCCs use a 16-18 week calendar. To ensure compliance with FTES reporting standards, the CO recommends that districts use an 18 week term to calculate hour-to-unit ratios on Course Outlines of Record.

- ◆ Standard Unit calculation of 3 hours per week over the entire term = 1 unit of credit.
- ◆ $18 \text{ weeks} \times 3 \text{ hours} = 54 \text{ hours}$.

Calculating Units: Lecture

Definition: typically defined as instruction to the entire class by the instructor, but may include directed small group work, student presentations, critiques, and other teaching methodologies.

Basics for 1-unit of Lecture Credit:

- ◆ 18 hours in-class
- ◆ 36 hours homework.
- ◆ 54 total student learning hours.

Calculating Units: Lab

Instructor-supervised time-on-task in a specialized learning facility / environment such as a biology lab, art studio, or athletic facility. Characterized by one-on-one interaction between instructor and student.

Basics for 1-unit of Lab Credit:

- ◆ 54 hours in-class
- ◆ No homework
- ◆ 54 total student learning hours.

Calculating Units: Lecture/Lab

Courses that intermix lecture and instructor-supervised time on task in a specialized learning facility / environment such as an art studio, computer lab, welding shop, or athletic facility. Students typically meet for both components within same scheduled class period and classroom or facility.

Sample calculation for a 3-unit of Lecture / Lab Course*:

- ◆ 36 hours in-class lecture
 - ◆ 72 hours in-class lab
 - ◆ 54 hours homework
-
- ◆ 162 total student learning hours.

**Calculating the correct hour to unit ratios for these courses is challenging as the ratio between the two instructional methods varies by discipline. The key is to establish consistent, objective standards.*

Calculating Units: Other Instructional Formats

While the majority of courses fall under lecture or lab calculations, some districts use other instructional formats that are locally defined and use locally-determined calculations for units. These are typically variations on labs or labs with some lecture or homework hours. Examples include: Clinicals, Integrated Lab, etc.

Basics for 1-unit of Credit:

- ◆ Regardless of the local format and policy, the same basic calculation applies: 48 - 54 hours of total student learning hours = 1 unit of credit.
- ◆ Example: Integrated lab with 36 hours of in-class and 18 hours of homework for 1 unit.

Calculating Units: Other Instructional Formats

- ◆ Discussed on page 101 of the PCAH (5th ed.)
- ◆ Important to establish consistent, objective calculations for locally defined course categories that are compliant with regulation.
- ◆ Ensure that locally defined calculations for these courses do not affect transferability or articulation of courses.
- ◆ Ensure that local policies and processes are consistent with the general parameters and principles outlined in the PCAH.
- ◆ Understand where regulations are prescriptive and where they are permissive of locally-developed policies and practices.

Calculating Units: Term Length

Not every class in the catalog meets for the standard 16-18 weeks every time it is offered.

- ◆ Summer session, intersession, and short-term courses within a semester compress the usual per week hours for courses.
- ◆ CTE Courses (CJT and Nursing) often run more than 18 weeks per term.

Recording all hours of instruction on the COR allows for easy p/week calculation to determine when and if a course should be approved for compressed formats.

Considering Term Length in Curricular Decisions

Some local committees include approval of term lengths as part of the COR review process. In these instances, committees should consider if the proposed weekly / daily hours can be reasonably achieved by a student in a short format? For example:

- ◆ 3-unit ENGL 101 proposed for 2-week term. 54 in-class / 108 homework. Would be 27 hours in-class p/week and 54 hours p/week in homework.
- ◆ 81 total student hours in one week may not be reasonable.

IV. Examples



Examples: Lecture Calculations

Example 1:

ENGL 101 meets for 4 hours per week over a 16 week semester.

- ◆ How many hours of outside-of-class work should be listed on the COR?
- ◆ How many total student learning hours?
- ◆ How many units of credit should be recorded on the course outline of record?

ANSWERS: 144 hours, 216 hours, 4 units.

Examples: Lecture Calculations

Example 1: Explanations

Total Homework Hours:

- ◆ 144. Even though the example course is offered on a 16-week format, CO recommendations are to use the 18-week term for Course Outlines of Record calculations. 4 hrs p/week x 18 = 72 hours of lecture or in-class work. Lecture calculations typically use a 1:2 ratio for in-class to outside-of-class. $72 \times 2 = 144$

Examples: Lecture Calculations

Example 1: Explanations

Total Student Learning Hours:

- 216. Unit calculations are based on the total number of hours a student spends on course work, inclusive of in-class and out-of-class work. In the first question, we determined that the COR should reflect that the class meets for 72 hours of lecture and have 144 hours of associated homework.
 $72+144 = 216.$

Examples: Lecture Calculations

Example 1: Explanations

Units :

- 4. Based on the following calculation of total student learning hours divided by standard hours per unit.
(72 lecture + 144 homework) = 216.

$$216 / 54 = 4 \text{ units.}$$

Examples: Lab Calculations

Example 2:

WELD 130 meets for 3 hours of lab per week for 18 weeks.

- ◆ How many hours of outside-of-class work should be listed on the COR?
- ◆ How many total student learning hours?
- ◆ How many units of credit should be recorded on the course outline of record?

ANSWERS: 0 hours, 54 hours, 1 unit.

Examples: Combined Lecture Lab Calculations

Example 3:

ARTS 130 meets for 6 hours per week over an 18-week semester for 3 units of credit.

- ◆ How many hours of lecture should be listed on the COR?
- ◆ How many hours of lab?
- ◆ How many hours of homework?
- ◆ How many total student learning hours?

ANSWERS: 36 hours, 72 hours, 54-72 hours, 162-180 hours.**

V. “Wait, What Was That?”

An sneak peak at advanced topics in
hours and units.



Sneak Peak at Advanced Topics Breakout

- ◆ Minimum hours, hour ranges, and unit increments.
- ◆ Common pressures Curriculum Committees face in approving hour and unit configurations, including faculty load, contracts, ignorance, outside accreditation, and students, among others.
- ◆ Accreditation and Academic Credit
- ◆ Local Standards vs. Regulatory Requirements

VI. Tips for New Committee Chairs



Tips for New Chairs

- ◆ Remember that 54 hours = 1 unit
- ◆ Discuss and record total instructional hours: weekly hours are rarely used by curriculum committees.
- ◆ Develop and follow consistent local policies and practices for awarding units of credit: a good policy goes a long way towards preventing abuses and conflict.
- ◆ Record local policies in your handbook.
- ◆ Read the PCAH
- ◆ Learn to calculate units in your sleep.
- ◆ Remember that local practices vary across the state: just because one district handles it a certain way doesn't mean that you must or should.

Questions?

John Stankas, San Bernardino Valley College

Sharon Lowry, Antelope Valley College

Erik Shearer, Napa Valley College

