

Relationship of Hours to Units

Curriculum Committee

Napa Valley College uses the basic structure of the Carnegie Unit to determine the relationship of hours of student work to academic credits. As a California Community College, NVC is further bound by the regulations found in Title 5 and in the Program and Course Approval Handbook, a text maintained by the Chancellor's Office and incorporated by reference into state regulations.

I. Overview and Definitions

All calculations of units and hours are based on the total number of hours a student spends inside and outside of the classroom, expressed in distinct ratios for specific categories of courses. In this framework, 54 hours of student work, inclusive of work inside and outside of the classroom, equals 1 unit of academic credit. Title 5 requires that college award units in .5 increments when the total number of hours reaches 27 - 53 total student hours and for 2 units to be awarded once student hours reach 108.

The following definitions are derived from multiple sources, including Title 5, PCAH, SAAM, and NVC regulations and handbooks.

- Catalog Hours: The total hours a student will spend in the classroom as recorded on the Course Outline of Record (COR) and recorded in the College Catalog. This is distinguished from Scheduling or Contact Hours.
- Homework Hours: The total average hours an average student will spend on out-of-classroom assignments.
- Student Hours: Total time a student will spend on course work, inclusive of all in-class and homework hours.
- Weekly Hours: Catalog hours divided by the term length.
- Scheduling Hours: The number of hours a given section of a course meets in a given term.
- Contact Hours: Counting of in-class hours used to calculate FTES for apportionment. Includes separate calculations for Weekly, Daily, and Positive Attendance Contact Hours.
- Lecture: (Ratio of In-class to Homework Hours is 1:2) An instructional method that primarily utilizes full-class or group content delivery. May include some small group work, presentations, and discussion.
- Lab: (Ratio of In-class to Homework Hours is 3:0.) An instructional method where students are primarily working independently or in groups to develop or practice skills in a laboratory, workshop, studio, court, field, or other specialized instructional space. Instructor supervises and directs activity at the student or small group level for most of the class period.
- Integrated Lab: (Ratio of In-class to Homework Hours is 2:1) An instructional method where the instructor switches between lecture and lab instruction in the same class period and classroom.

II. Basic Calculations

For one unit of credit, the following general calculations apply:

Course Category	Catalog Hours	Homework Hours	Total Student Hours
Lecture	18	36	54
Lab	54	0	54
Integrated Lab	36	18	54

It is important to note that in this and the following tables the hour values associated with each unit value represent a *minimum* number of hours for each unit of credit. In practice, there is a range of hours between the minimum values for each .5 increment. For example: 1 unit of lecture is typically calculated at 18 catalog hours, 1.5 units at 27 hours. In actuality, 1 unit represents 18-26 hours. Likewise, 1 unit of lab is typically calculated at 54 catalog hours with 1.5 units starting at 81 hours. The true hour range for one unit, however, is 54 – 80.

III. Calculations for Lecture

Total Units	Curriculum Calculations			Term Calculations			
	Total Catalog Hours	Total Homework Hours	Total Student Hours	Weekly Hours (18 Weeks)	Weekly Hours (9 Weeks)	Weekly Hours (8 Weeks)	Weekly Hours (6 Weeks)
0.5	9	18	27	0.5	1	1.13	1.5
1.0	18	36	54	1.0	2	2.25	3.0
1.5	27	54	81	1.5	3	3.38	4.5
2.0	36	72	108	2.0	4	4.50	6.0
2.5	45	90	135	2.5	5	5.63	7.5
3.0	54	108	162	3.0	6	6.75	9.0
3.5	63	126	189	3.5	7	7.88	10.5
4.0	72	144	216	4.0	8	9.00	12.0
4.5	81	162	243	4.5	9	10.13	13.5
5.0	90	180	270	5.0	10	11.25	15.0
5.5	99	198	297	5.5	11	12.38	16.5
6.0	108	216	324	6.0	12	13.50	18.0
6.5	117	234	351	6.5	13	14.63	19.5
7.0	126	252	378	7.0	14	15.75	21.0
7.5	135	270	405	7.5	15	16.88	22.5
8.0	144	288	432	8.0	16	18.00	24.0
8.5	153	306	459	8.5	17	19.13	25.5
9.0	162	324	486	9.0	18	20.25	27.0
9.5	171	342	513	9.5	19	21.38	28.5
10.0	180	360	540	10.0	20	22.50	30.0

IV. Calculations for Lab

Total Units	Curriculum Calculations			Scheduling Calculations			
	Total Catalog Hours	Total Homework Hours	Total Student Hours	Weekly Hours (18 Weeks)	Weekly Hours (9 Weeks)	Weekly Hours (8 Weeks)	Weekly Hours (6 Weeks)
0.5	27	0	27	1.5	3	3.38	4.5
1.0	54	0	54	3.0	6	6.75	9.0
1.5	81	0	81	4.5	9	10.13	13.5
2.0	108	0	108	6.0	12	13.50	18.0
2.5	135	0	135	7.5	15	16.88	22.5
3.0	162	0	162	9.0	18	20.25	27.0
3.5	189	0	189	10.5	21	23.63	31.5
4.0	216	0	216	12.0	24	27.00	36.0
4.5	243	0	243	13.5	27	30.38	40.5
5.0	270	0	270	15.0	30	33.75	45.0
5.5	297	0	297	16.5	33	37.13	49.5
6.0	324	0	324	18.0	36	40.50	54.0
6.5	351	0	351	19.5	39	43.88	58.5
7.0	378	0	378	21.0	42	47.25	63.0
7.5	405	0	405	22.5	45	50.63	67.5
8.0	432	0	432	24.0	48	54.00	72.0
8.5	459	0	459	25.5	51	57.38	76.5
9.0	486	0	486	27.0	54	60.75	81.0
9.5	513	0	513	28.5	57	64.13	85.5
10.0	540	0	540	30.0	60	67.50	90.0

V. Integrated Lab Calculations

Total Units	Curriculum Calculations			Scheduling Calculations			
	Total Catalog Hours	Total Homework Hours	Total Student Hours	Weekly Hours (18 Weeks)	Weekly Hours (9 Weeks)	Weekly Hours (8 Weeks)	Weekly Hours (6 Weeks)
0.5	18	9	27	1.0	2	2.25	3.0
1.0	36	18	54	2.0	4	4.50	6.0
1.5	54	27	81	3.0	6	6.75	9.0
2.0	72	36	108	4.0	8	9.00	12.0
2.5	90	45	135	5.0	10	11.25	15.0
3.0	108	54	162	6.0	12	13.50	18.0
3.5	126	63	189	7.0	14	15.75	21.0
4.0	144	72	216	8.0	16	18.00	24.0
4.5	162	81	243	9.0	18	20.25	27.0
5.0	180	90	270	10.0	20	22.50	30.0
5.5	198	99	297	11.0	22	24.75	33.0
6.0	216	108	324	12.0	24	27.00	36.0
6.5	234	117	351	13.0	26	29.25	39.0
7.0	252	126	378	14.0	28	31.50	42.0
7.5	270	135	405	15.0	30	33.75	45.0
8.0	288	144	432	16.0	32	36.00	48.0
8.5	306	153	459	17.0	34	38.25	51.0
9.0	324	162	486	18.0	36	40.50	54.0
9.5	342	171	513	19.0	38	42.75	57.0
10.0	360	180	540	20.0	40	45.00	60.0

VI. Lecture / Lab Courses

Lecture / Lab is the fourth basic course category, combining both lecture and lab formats in a single COR. Calculating the correct hour to unit ratios for these courses is challenging as the ratio between the two instructional methods varies by discipline and by course. The table below provides a couple of examples based on typical NVC courses.

Total Units	Curriculum Calculations				Scheduling Calculations			
	Total Lecture Hours	Total Lab Hours	Total Homework Hours	Total Student Hours	Weekly Hours (18 Weeks)	Weekly Hours (9 Weeks)	Weekly Hours (8 Weeks)	Weekly Hours (6 Weeks)
1.0	18	18	36	72	2.0	4.0	4.5	6.0
2.0	18	54	36	108	4.0	8.0	9.0	12.0
3.0	36	72	72	180	6.0	12.0	13.5	18.0
4.0	54	54	108	216	6.0	12.0	13.5	18.0
5.0	54	108	108	270	9.0	18.0	20.3	27.0

Note that in the example shown above for 3 units, that the Total Student Hours calculation is above the 162 minimum hours for 3 units of credit, but below the 189 hour threshold where the college would need to offer the course for 3.5 units of credit.

Again, Lecture / Lab combinations vary from discipline to discipline and between courses within disciplines. The table above provides examples, but is neither exhaustive nor prescriptive of how courses must be structured and hours / units calculated. The easiest way to determine the appropriate units is to divide the Total Student Hours (TSH) by 54. For example, if a course requires a 195 total student hours—inclusive of lecture, lab, and homework hours—then the following calculation applies:

- $195 \text{ TSH} / 54 = 3.61$
- Round down to nearest .5
- **3.5 units of credit**

VII. Authority and References

The recommendations in this document are consistent with and derived from current regulations and practices related to Unit / Hour calculations. The following specific regulations, documents, and handbooks provide the legal framework for the above calculations and recommendations:

- Title 5 of the California Code of Regulations §55002.5
- Program and Course Approval Handbook (PCAH): pp. 46-49. This document is maintained by the Chancellor's Office and is incorporated by reference into Regulations by T5 §55000.5.
- Student Attendance and Accounting Manual (SAAM): 2001 Ed.
- CCCCCO Advisory Memos: Catalog Hours vs. Scheduling Hours, Contact Hours Computation Chart.