

Student/Faculty Ratios (SFRs) Explained

FTES: Full-Time Equivalent Students are calculated on the basis of 12 Student Credit Units (SCUs) for master's seeking students, and 15 SCUs for all others. When calculated for a class section, the mix of students (masters seeking and others) must be known, since it is the student and not the level of the course which determines the denominator for FTES.

For example, if a three unit class has 30 students enrolled, 20 undergraduates and 10 masters students, then the undergraduates would generate 60 SCU's and the masters students would generate 30 SCU's. The enrollment generated by the undergrads would be $60/15 = 4.0$ FTES and for the masters students it would be $30/12 = 2.5$ FTES, for a grand total of 6.5 FTES.

FTEF: Full-Time Equivalent Faculty by course subject area is determined using a series of calculations and adjustments which are not reproducible solely from the data pertaining to an individual class section.

First, the WTUs (Weighted teaching Units) are determined for each class section according to the K-factor or S-factor of the course mode of instruction (lecture, lab, activity, supervision, etc.). You may see the complete guide at the link below. Next, WTUs are adjusted for cross-listed classes. For all classes that are offered at the same time and location and by the same instructor, the WTUs are discounted to reflect the instruction of a single class. These are then apportioned across each of the cross-listed sections according to enrollment.

At this point it may be tempting to simply divide the section WTUs by the typical 12 WTU load of a tenured/tenure track faculty member to determine the FTEF required for the section. This would only work if each faculty member had a 1.0 time-base and taught exactly 12 WTUs. It also presumes that no class sections are cross-listed. To attribute the correct FTEF to each section, each instructor's entire WTU load must be summed across all subject areas and classes they are teaching. Then, for each section, the FTEF is calculated as the section WTUs, divided by the instructor total WTUs, times the time base of the instructor. Thus a 1.0 appointment will have 1.0 FTEF attributed to all their sections and a .75 instructor will have .75 attributed. Section WTUs are apportioned to each instructor for team taught sections as well.

Here's an example to illustrate the calculation: If a tenured/tenure track faculty member is carrying 15 WTU's and is teaching a class where 3 WTU's are awarded, then the faculty members FTEF for that class would be $3/15$ or .20. Another faculty member carrying a 9 WTU load would receive $3/9$ or .33 FTEF for the class.

Position FTEF figures are reduced by funded assigned time and department chair appointments. Thus, the total FTEF used for the calculation of Student/Faculty Ratios, reflects the teaching resources available. It should be noted that for a tenured/tenure track faculty member who has no funded assigned time and is not a department chair, she/he will be a 1.0 FTEF regardless of the number of WTU's carried. As a consequence, a faculty member teaching an "overload" will not increase the FTEF total for the department and may in fact increase the overall SFR since any SCUs earned in the overload class(es) will increase the departmental FTES.

SFR: The Student/Faculty Ratio for a given course subject area is then FTES/FTEF with all the considerations described above. Historically, we have only published one gross SFR for each subject area. For the program elimination process, we have used the separate measures for undergraduate and graduate level SFRs.

WTU CALCULATION GUIDE

The following are the key elements and formula used to determine WTU usage based on census class enrollments by mode.

Mode	CS Code	Mode Description	Fact type	Wrkload factor
C-1	LEC	Large Lecture	K	1.00
C-2	LEC	Lecture-Discussion	K	1.00
C-3	LEC	Lecture-Composition/Counsel	K	1.00
C-4	LEC	Lecture-Composition/Math	K	1.00
C-5	SEM	Seminar	K	1.00
C-6	CLN	Clinical Process/on-camp	K	1.00
C-7	ACT	Activity-Art/Anth/Sci	K	1.30
C-8	ACT	Activity-Educ/SocSci/SciDemo	K	1.30
C-9	ACT	Activity-Music	K	1.30
C-10	ACT	Activity-Instrumental/Vocal	K	1.30
C-11	ACT	Activity-Physical Educ	K	1.30
C-12	ACT	Activity-Speech/Drama/Journ	K	1.30
C-13	ACT	Activity-Bus/Acct/Geog/ForLang	K	1.30
C-14	ACT	Activity-Remedial Instruction	K	1.30
C-15	LAB	Lab-Art/ForLang/Engl/IT	K	1.50
C-16	LAB	Lab-Sci/Psyc/NR/Engr/Photo	K	2.00
C-17	LAB	Demo Lab-Clinical/Off camp	K	2.00
C-18	ACT	Coaching-Major Intercol	K	6.00
C-19	ACT	Coaching-Minor Intercol	K	3.00
C-20	ACT	Prod Wrkshop-Art/Thea/Journ	K	3.00
C-21	ACT	Music-Major Perf Groups	K	3.00
C-78	TUT	Non-Traditional Instruction	K	.00
S-25	SUP	Supervision-Graduate(S3)	S	.50
S-36	SUP	Supervision-Undergrad(S2)	S	.33
S-48	SUP	Music-Studio Instruction(S1)	S	.25

For C-1 through C-21 WTU's are calculated as follows:

$$\text{WTU's} = \text{FACTOR} * \text{CLASS UNIT VALUE}$$

For variable unit classes, the highest enrolled unit value is used

For S-25, S-36, and S-48, WTU's are calculated as follows:

$$\text{WTU's} = \text{FACTOR} * \text{CLASS ENROLLMENT}$$

** C-78 generates zero WTUs regardless of the number of units

FTES note: Full-Time Equivalent Students are calculated on the basis of 12 Student Credit Units (SCUs) for master's students, and 15 SCUs per FTES for all others.

EXAMPLES

SUBJ	CRSE	ENRL	SECT UNITS	MODE	FACTOR	SCU's	APPROX WTU's
ENGL	100	27	3	C-4	1.00	81.0	3.00
JN	302	21	3	C-2	1.00	63.0	3.00
GEOG	312	21	3	C-13	1.30	63.0	3.90
HIST	383	45	3 TO 4	C-2	1.00	141.0	4.00
(39 students at 3 units, 6 students at 4 units)							
HIST	499	2	1 TO 4	S-36	.33	3.0	.66
(2 students enrolled in HIST 499 at 3 units)							
TPMS	751	97	1	S-25	.50	97.0	48.50