

Calculating FTEF, WTU and FTES for Faculty Workload Planning

Prepared by Vanetia Johnston for COSS Open Lab, 8/12/20 - Update TBD

FTEF:

Full Time Equivalent Faculty (FTEF) refers to the work percent based on an overall 1.00 full time workload, per faculty member. For example, your tenure or tenure track faculty are usually full time, which means they teach a workload of 1.00. Your lecturers may be appointed at many other percentages of 1.00, typically at .20 for each 3 unit class and approximately .27 for 4 unit classes. FTEF percent and compensation rate (full time base rate) are used to determine salary for each of your faculty.

EXAMPLE:

Lecturer A has a full time base rate (compensation rate) of \$5,500 per month. This rate is the amount the lecturer would be paid if they taught full time for one month of the academic year. When looking at FTEF, we determine full time as 1.00.

Lecturer A actually teaches one, 3-unit class. The FTEF for a 3 unit class is 0.20.

The lecturer will be paid based on the following calculation:

$\$5,500 \text{ (FT base rate)} \times 0.20 \text{ (FTEF for one, 3-unit class)} = \$1,100 \text{ monthly salary}$

Weighted Teaching Units (WTU):

WTU are the actual units for which a faculty member is credited in their workload based on the specific course they are teaching. Below you will find information on WTU calculations for a specific course, as determined when the course is developed and approved, as well as the formula for calculating WTU for a faculty appointment.

WTU Assigned to a Specific Course (APDB mapping values):

In peoplesoft, **MYSJSU**, you can find WTU calculations for a specific class on the Meetings tab, in **APDB mapping values** (right hand side in “class sections”). The APDB mapping values are determined when the course is established in a proposal process coordinated between the Department, the College and the AVP for Undergraduate Education or Graduate Studies.

When calculating WTU for regular classes referred to as **C classified courses** (seminars, labs, lectures, laboratories), you use a K factor (which is a constant number which determines the number of WTU assigned a particular course unit for the class). See the example below showing the how to calculate WTU for a C classified class.

Example of WTU Calculation for regular C classified (non-supervision) course:

Regular 3 unit class, Psyc 001.

To calculate the WTU for the course, you take the K factor (which is how many WTU are assigned per course unit) and multiply it by the component units ("class units"). NOTE: Component units are NOT WTU, they are the units the student earns for passing the class.

For this class: multiply the workload (K) factor of 1.0 by the Component units of 3.00.

$1.0 \times 3.0 = 3.0$ WTU for the class.

See below: screen shot from MYSJSU (regular class).

APDB Class Section Values		
CS Number:	02	
Workload Factor:	K	1.0
Component Units:	3.00	
Component Students:		
Group Code Control:		
APDB Learning Mode:	01	

If the course is a **supervision class** (e.g., directed readings, thesis, field work, etc.), the workload factor is called an S factor rather than a K factor. Supervision courses may be referred to as **S classified courses**. The S factor refers to the percent each enrolled student factors into the WTU calculation – or how much each enrolled student is weighted into the calculation of WTU. WTU for supervision classes factor enrollments into the equation; the WTU are not related to course units.

Example of WTU Calculation for supervision course:

For Psyc 299, a 1.00 unit supervision class, you can see that the S factor is .50 in the APDB Class Section values from the Meeting Pattern tab in Schedule of Classes, Schedule a New Class or Maintain Schedule of Classes.

You calculate the WTU by multiplying the S workload factor of 0.500 by number of students enrolled to obtain the WTU for the course.

-- Actual calculation: $.500 \text{ (S factor)} \times \text{number of students enrolled} = \text{WTU}$

So, if 5 students are enrolled, the WTU assigned to the faculty member is calculated as follows: $.500 \text{ (S factor)} \times 5 \text{ (students)} = 2.5 \text{ WTU}$.

APDB Class Section Values

CS Number:	25	
Workload Factor:	S	0.500
Component Units:	1.00	
Component Students:	1.00	
Group Code Control:		
APDB Learning Mode:	01	

For additional reference materials on FTEF, WTU, and Course Classifications, see the APPENDIX.

FTES:

FTES (full time equivalent students) is calculated to review enrollments, enrollment projections, and enrollment targets. Chairs are usually involved in reviewing these calculations, but some analysts/dept. admins may be interested in and may perform some calculations to review with the chair.

FTES is calculated using the course units assigned to a specific course:

For undergraduate and post bac courses, the calculation is:

(# of course units x # of students enrolled in the course as of census)/15 (fulltime enrollment for undergrad student).

For graduate students, the calculation is:

(# of course units x # of students enrolled in the course as of census)/12 (full time enrollment for grad student).

Example

Psychology 100W is a 3 unit undergraduate course. 20 students are enrolled in the course for fall 2020 as of census. The FTES generated for this class is calculated as follows:

$$3 \text{ (course units)} \times 20 \text{ (students)} = 60$$

$$60/15 = 4 \text{ (FTES generated by Psychology 100W above).}$$

Each year, our departments and the College try to meet FTES targets assigned by the College Office and eventually by the Provost's Office. We first look at the total FTES generated by your department per semester, by calculating the total FTES generated by each course (using the above formulas) and adding together the FTES calculated for each course offered in the semester by that department.

We compare the actual generated FTES per department to the established targets for the semester to see if we are under, meet, or exceed the College target FTES numbers.

Some years we benefit financially for exceeding targets. We may receive additional OE monies for exceeding our target. Other years we may be requested to not exceed target and might be penalized for exceeding target.

These FTES goals are estimated in the College by reviewing enrollments and FTES totals per department, per semester, for the last three years. Those goals are made available for review by all chairs in the College. Your department chair reviews these estimated targets with the Dean and/or Associate Dean.

However, actual targets are determined by the Provost Office. See the Appendix for links to enrollment reports that include FTES reports organized by various criteria.

APPENDIX:

Table of Typical WTU Values Associated with Common FTEF:

Examples of FTE/WTU		NOTE: Based on typical 3 unit lecture class = 3 WTU (assuming K factor is 1.00)	
Employee Work Hours Per Week	Employee Work Hours Per Day	Full Time Equivalent (FTEF)	Weighted Teaching Units
40	8	1	15
32	6.4	0.8	12
24	4.8	0.6	9
16	3.2	0.4	6
10.8	2.16	0.27	4
8	1.6	0.2	3
5.2	1.04	0.13	2
2.8	0.56	0.07	1
40*FTE	8*FTE	Actual WTU/15	A 3 unit lecture class = 3 WTU

Other useful reference tables found in the University Personnel website.

https://www.sjsu.edu/up/docs/WTU_Values_Sorted_Decimal.pdf

https://www.sjsu.edu/up/docs/WTU_Values_Sorted_Fraction.pdf

https://www.sjsu.edu/up/docs/WTU_Values_Sorted_WTU.pdf

Course Classification Information (includes breakdown of C factor and S factor courses)

https://m.jmc.sjsu.edu/gup/docs/Course_Classification_Inf_for_CMS.pdf

PROPOSED 2019-2020 Annualized FTES Allocation (shows proposed targets)

Proposed 2019-2020 Annualized FTES Allocation											
A	B	C	D	E	F	G	H	I	J	K	L
Historical FTES Annualized				Projected Annualized		Fall 2019 FTES Goals			Spring 2020 FTES Goals		
	Annualized FTES 2016-2017	Annualized FTES 2017-2018	Annualized FTES 2018-2019	% 2018-19 Annualized FTES (D/4991)	2019-20 Annualized FTES Goal (E*4991)	Fall FTES Goal (E*Fall Goal)	Fall Actual FTES as of 9/11/19	Difference in FTES (H - G)	Spring FTES Goal	Spring Actual FTES as of	Difference in FTES (J - K)
AFAM	29	25	46	0.93%	46	49	82.9	34	44		
ANTH	247	215	247	4.96%	248	260	282.1	22	235		
CCS	180	224	222	4.46%	223	234	224.9	-9	212		
COMM	937	939	976	19.62%	979	1028	1023.6	-4	930		
ECON	490	507	545	10.95%	547	574	548.8	-25	519		
ENVS & GLST	252	283	270	5.43%	271	284	268.8	-16	257		
HIST	275	285	320	6.43%	321	337	352.3	15	305		
POLS	371	456	454	9.12%	455	478	517.9	40	432		
PSYC	1008	1031	1051	21.13%	1054	1107	1112.0	5	1002		
SISS	596	621	659	13.25%	661	694	642.7	-52	628		
URBP & GEOG	189	199	185	3.72%	186	195	186.7	-8	176		
Totals:	4573	4785	4976	100.00%	4991	5241	5243	2	4741		0
						Goals	Actual	Difference			
Fall 2019						5241	5243	2.1			
Spring 2020						4741	0	-4741.5			
Annualized 2019-2020						4991	2621	-2369.7			

Notes:

1) The goal assume a 5% decrease in FTES between spring and fall

2) Data pulled from Student Data Warehouse and IEA

3) NOTE: Have yet to receive targets and goals for this AY: Current goal is based on last AY actual annualized FTES

Enrollment Reports from Institutional Research and Academic Scheduling. Some reports include FTES calculations per department.

From the Institutional Research website:

<http://iea.sjsu.edu/Students/Enrollment/> - this site shows data that goes to the Chancellor's office

and from the Academic Scheduling website:

https://www.sjsu.edu/academicscheduling/Enrollment_Status_Summary_Report/

Explanation of FTES calculation use of 15 for undergraduates and 12 for graduates in formula

http://www.iea.sjsu.edu/Others/terms/TE_BrowserStep.pdf