

### Faculty and Course Dashboards Using APDB Data

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#### INTRODUCTION

This poster presentation serves to identify and relate the processes and methods used in the Office of Institutional Research, Effectiveness and Planning (OIREP) to utilize information collected from the University's Common Management System (CMS), specifically in relation to Administration and HR data, to create meaningful and useful reports for the campus community. These reports are now even more dynamic in Tableau.

#### **PROCESSES**

- -Extract information from the CMS System for any given semester -Perform standard APDB edits and submit final APDB report to the Chancellor's Office
- -Use flat faculty and section summary files received from the Chancellor's Office to generate reports
- -Verify and cross reference all data inputs
- -Create 3 reports and use Tableau for interactive visualization

# Smith ID: Workload Definition Find | View All | First | 2 of 10 | 2 as a cademic Institution: SACST | Sacramento State | Total Term FTE% | 80.00 | Instructor Assignment Class: FT | Full-Time | Primary Department: 187 | Full-Time | Primary Department: 187 | Full-Time | Primary Department: 187 | Assignments | Primary Department | IFF | IAF | OSE | Importance | Import

After acquiring the *Course Section* and *Faculty Summary* files from the Chancellor's Office, we take the file and merge the section summary file with data provided by the Office of Human Resources. Once the data is merged and free of error, the following base reports are created to which the dashboards are then formalized in Tableau.

J	L	M	N	0	Р	Q	R	S	Т	U	V	W	X	Υ	Z	AA	AB	AC	AD
												College							
Team Teaching	Last	First					Course					Descrip		Department	SCU UG	SCU GR	FTES UG	FTES GR	FTES TOT
Fraction 💌	Nam€ ▼	Name ▼	HR Name ▼	APDB Name	▼ New FT	▼ Course ▼	Abbreviati( *	Course Numb ▼	Course Suf ▼	Section Numb ▼	Colle ▼	tior ▼ D	epartme 🔻	Descriptic *	_	~	_	_	▼
1	Xiong	Yan	Xiong, Yan	Y Xiong	0.3	3 ACCY 11	ACCY	1		1	BUS	Busines: B	US	Business	186	0	12.40	0.00	12.40
1	Zhang	Jin	Zhang, Jin	J Zhang	0.3	3 ACCY 12	ACCY	1		2	BUS	Busines: B	US	Business	159	0	10.60	0.00	10.60
1	Deng	Feng	Deng, Feng	F Deng	0.3	O ACCY 14	ACCY	1		4	BUS	Busines: B	US	Business	219	0	14.60	0.00	14.60
1	Roberts	Roslyn	Roberts, Roslyn	RARoberts	0.5	O ACCY 15	ACCY	1		5	BUS	Busines: B	US	Business	180	0	12.00	0.00	12.00
1	Roberts	Roslyn	Roberts, Roslyn	RARoberts	0.5	O ACCY 16	ACCY	1		6	BUS	Busines: B	US	Business	168	3	11.20	0.25	11.45
1	Tang	Jacky	Tang, Jacky	J Tang	0.2	0 ACCY 17	ACCY	1		7	BUS	Busines: B	US	Business	180	0	12.00	0.00	12.00
1	Deng	Feng	Deng, Feng	F Deng	0.:	.0 ACCY 180	ACCY	1		80	BUS	Busines: B	US	Business	75	0	5.00	0.00	5.00
1	Deng	Feng	Deng, Feng	F Deng	0.1	.0 ACCY 181	ACCY	1		81	BUS	Busines: B	US	Business	69	0	4.60	0.00	4.60
1	Zhang	Jin	Zhang, Jin	J Zhang	0.3	3 ACCY 19	ACCY	1		9	BUS	Busines: B	US	Business	168	0	11.20	0.00	11.20
1	Xiong	Yan	Xiong, Yan	Y Xiong	0.3	3 ACCY 111 1	ACCY	111		1	BUS	Busines: B	US	Business	177	0	11.80	0.00	11.80
1	Xiong	Yan	Xiong, Yan	Y Xiong	0.3	3 ACCY 111 2	ACCY	111		2	BUS	Busines: B	US	Business	177	0	11.80	0.00	11.80
1	Davis	Charles	Davis, Charles	CJDavis	0.3	3 ACCY 111 3	ACCY	111		3	BUS	Busines: B	US	Business	159	0	10.60	0.00	10.60
1	Ogilby	Suzanne	Ogilby, Suzanne	SMOgilby	0.3	2 ACCY 112 4	ACCY	112		4	BUS	Busines: B	US	Business	168	0	11.20	0.00	11.20
1	Ogilby	Suzanne	Ogilby, Suzanne	SMOgilby	0.3	2 ACCY 112 5	ACCY	112		5	BUS	Busines: B	US	Business	144	0	9.60	0.00	9.60
1	Adcock	Donald	Adcock, Donald	DRAdcock	0.2	0 ACCY 112 6	ACCY	112		6	BUS	Busines: B	US	Business	168	0	11.20	0.00	11.20
1	Davis	Charles	Davis, Charles	CJDavis	0.3	3 ACCY 113 1	ACCY	113		1	BUS	Busines: B	US	Business	153	0	10.20	0.00	10.20
1	Davis	Charles	Davis, Charles	CJDavis	0.3	3 ACCY 113 2	ACCY	113		2	BUS	Busines: B	US	Business	135	0	9.00	0.00	9.00
1	Tran	KieuChin	Tran, KieuChinh	KTTran	0.2	0 ACCY 113 3	ACCY	113		3	BUS	Busines: B	US	Business	99	0	6.60	0.00	6.60
1	Zhang	Jin	Zhang, Jin	J Zhang	0.3	3 ACCY 117 1	ACCY	117		1	BUS	Busines: B	US	Business	132	0	8.80	0.00	8.80
1	Pforsich	Hugh	Pforsich, Hugh	HDPforsich	0.5	0 ACCY 121 3	ACCY	121		3	BUS	Busines: B	US	Business	369	0	24.60	0.00	24.60
1	Panggabe	Tota	Panggabean, Tot	TUPanggabean	0.2	7 ACCY 121 6	ACCY	121		6	BUS	Busines: B	US	Business	141	0	9.40	0.00	9.40
1	Panggabe	Tota	Panggabean, Tot	TUPanggabean	0.2	7 ACCY 121 7	ACCY	121		7	BUS	Busines: B	US	Business	66	0	4.40	0.00	4.40
1	Deng	Feng	Deng, Feng	F Deng	0.5	0 ACCY 122 2	ACCY	122		2	BUS	Busines: B	US	Business	129	0	8.60	0.00	8.60
1	Mubako	Grace	Mubako, Grace	G Mubako	0.5	0 ACCY 131 1	ACCY	131		1	BUS	Busines: B	US	Business	138	0	9.20	0.00	9.20
1	Liu	Caixing	Liu, Caixing	C Liu	0.5	0 ACCY 131 2	ACCY	131		2	BUS	Busines: B	US	Business	129	0	8.60	0.00	8.60
1	Liu	Caixing	Liu, Caixing	C Liu	0.5	0 ACCY 131 3	ACCY	131		3	BUS	Busines: B	US	Business	129	0	8.60	0.00	8.60
1	Mubako	Grace	Mubako, Grace	G Mubako	0.5	0 ACCY 1314	ACCY	131		4	BUS	Busines: B	US	Business	45	0	3.00	0.00	3.00
1	Perkins	Stephanie	e Perkins, Stephar	SSPerkins	0.2	0 ACCY 132 1	ACCY	132		1	BUS	Busines: B	US	Business	129	0	8.60	0.00	8.60

The old method of creating the Faculty Course Assignment report details the instructor's workload by individual course(s), student course credit, enrollment per section, team teaching percentage, Weighted Teaching Unit and FTES generated in Excel. Every department on campus will get a detail report of their faculty's teaching assignment. In the old Excel version it was neat, tedious but also static and the final result was a PDF which was hard to pinpoint each data element quickly. Department totals were available but not College Totals.

#### English Faculty Course Assignment (Fall 2017)

Name	Course	Section	Course Credits	Enrollment	Team Teaching	Student FTE	WTU
Stagnaro, MJ	ENGL 10	19	3	22	100	4.4	3.0
Stagnaro, MJ	ENGL 10	21	3	22	100	4.4	3.0
Stagnaro, MJ	Total	4,500	175 PG4	66	100200	13.2	9.0
Stanley, RD	ENGL 10	30	3	23	100	4.6	3.0
Stanley, RD	ENGL 10	37	3	22	100	4.4	3.0
Stanley, RD	ENGL 121	1	1	81	100	5.4	27.0
Stanley, RD	Total			126	- 3	14.4	33.0
Sweet, NF	ENGL 150P	1	3	45	100	9.1	3.0
Sweet, NF	ENGL 410F	1	3	5	100	1.2	2.5
Sweet, NF	ENGL 50A	1	3	107	100	21.4	3.0
Sweet, NF	Total		. 1118	157	38/38/20 13	31.7	8.5
Toise, DW	ENGL 120A	3	3	32	100	6.5	3.0
Toise, DW	ENGL 195A	2	3	13	100	2.6	4.3
Toise, DW	ENGL 60	2	1	26	100	1.8	1.3
Toise, DW	ENGL 60	4	1	30	100	2.0	1.3
Toise, DW	ENGL 60	6	1	25	100	1.7	1.3
Toise, DW	Total	18915	1.10	126	130 0 102	14.5	11.2
Tran, V	ENGL 5	80	3	26	100	5.2	3.0
Tran, V	ENGL 5	85	3	26	100	5.2	3.0
Tran, V	Total			52		10.4	6.0
Trimble, JM	ENGL 20	1	3	28	100	5.6	3.0
Trimble, JM	ENGL 20	36	3	29	100	5.8	3.0
Trimble, JM	ENGL 20	48	3	30	100	6.0	3.0
Trimble, JM	ENGL 5	5	3	25	100	5.0	3.0
Trimble, JM	ENGL 5	48	3	24	100	4.8	3.0
Trimble, JM	Total			136		27.2	15.0
Wanlass, S	ENGL 150L	1	3	37	100	7.5	3.0
Wanlass, S	ENGL 250U	1	3	15	100	3.8	3.0
Wanlass, S	Total			52		11.3	6.0
Yen, JW	ENGL 141A	1	3	30	100	6.0	3.0
Yen, JW	ENGL 145C	1	3	39	100	7.8	3.0
Yen, JW	Total			69		13.8	6.0
Zarins, K	ENGL 116B	2	3	34	100	6.8	3.0
Zarins, K	ENGL 116B	3	3	36	100	7.2	3.0
Zarins, K	ENGL 40A	1	3	105	100	21.0	3.0
Zarins, K	Total	•		175	100	35.0	9.0
Grand Total	1 0 001			7128	71	1344.9	793.6

Please Note: (\*) Indicates that the instructor teaches courses in more than one department.

The new more interactive *Faculty Course Assignment* report details the instructor's workload by individual course(s), student course credit, enrollment per section, team teaching percentage, Weighted Teaching Unit and FTES generated. But now, users can drill down by each of the Colleges, Departments, and even by Faculty. The visualization allows the user to get College, Department totals based on their preferences. And most importantly....they can do this quickly.

#### The Faculty Teaching Assignment Report (Spring 2019)

To view the report below: Pick a College and/or Department to see the results

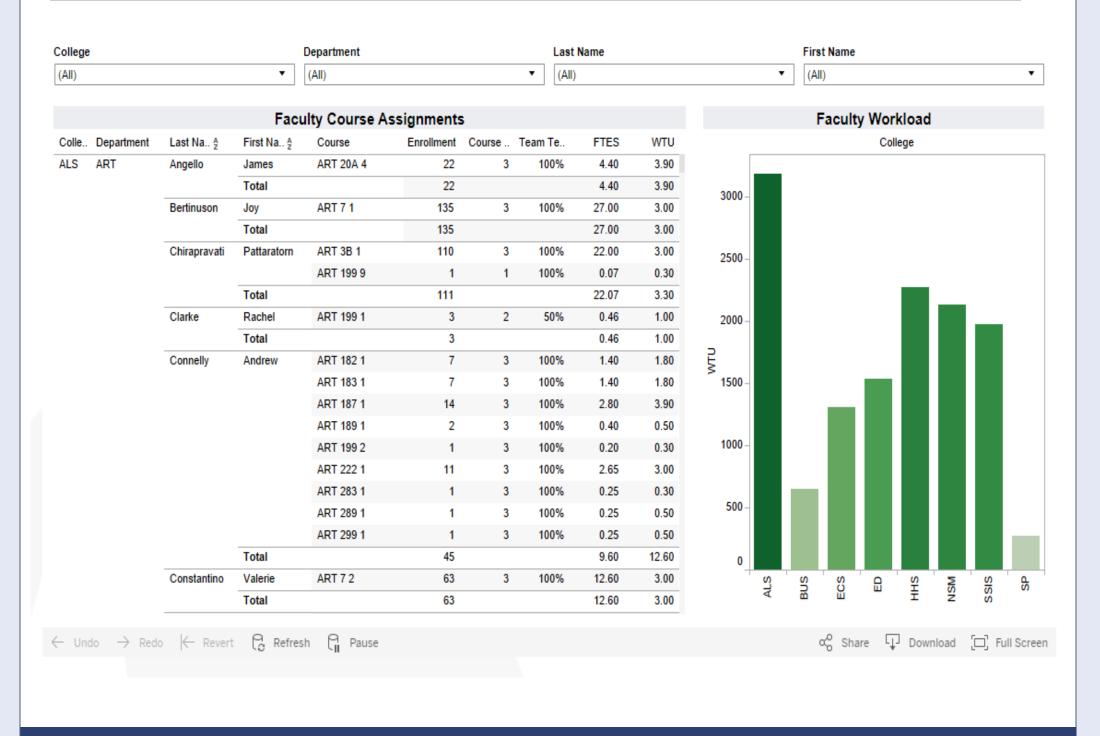
This report is based on the Academic Planning Data Base submitted to and approved by the Chancellor's Office on the Census Date of spring 2019. The report displays the detailed information regarding faculty teaching load, such as course sections, student course credits, section enrollment, student FTE and weighted teaching units (WTU) by individual faculty member and department.

College	∀ ▼	Department			
(All)	•	(All)			•
		Spring 2019			
College Description	Enrollment	FTES	FTEF	SCU	WTU
Arts & Letters (ALS)	32,718	6,157.44	248.80	91,935.00	3,183.10
Business Administration (BUS)	11,271	2,092.13	73.16	31,077.00	648.70
Education (ED)	13,201	2,482.87	124.75	35,920.40	1,533.20
Engineering & Computer Science (ECS)	14,007	2,057.51	98.75	30,176.20	1,311.10
Health & Human Services (HHS)	20,715	3,805.36	175.44	55,663.70	2,269.70
Natural Sciences & Mathematics (NSM)	23,882	3,604.37	165.24	53,876.40	2,132.30

109.37

1,639.00

272.60

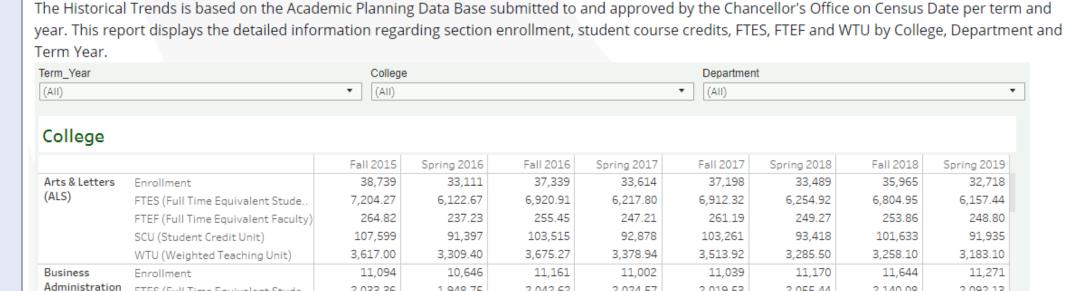


ADDITIONAL TABLEAU DASHBOARDS

#### HISTORICAL TRENDS

The reports are also used to create trends analyses. The 5-year academic comparison report shows the difference in FTES, FTEF, SCU and WTU, as well as related trends. Again, by adding in the same information from the previous terms, we now have historical data that is easily accessible and more dynamic. The statistics are manageable and drillable based on the users needs. The user can decide to create even more meaningful tables and graphs.

#### Historical Trends



partment		

		Arts & Letters (ALS)									
Department		Fall 2015	Spring 2016	Fall 2016	Spring 2017	Fall 2017	Spring 2018	Fall 2018	Spring 2019	Fall 2015	Spring 201
AERO	Enrollment										
	FTES (Full Time Equivalent Student)										
	FTEF (Full Time Equivalent Faculty)										
	SCU (Student Credit Unit)										
	WTU (Weighted Teaching Unit)										
ALS	Enrollment	777	523	927	378	841	405	82			
	FTES (Full Time Equivalent Student)	75.13	41.80	84.75	25.37	74.60	27.13	16.40			
	FTEF (Full Time Equivalent Faculty)	1.20	0.90	0.87	1.01	0.39	1.11	0.50			
	SCU (Student Credit Unit)	1,127.00	627.00	1,271.00	380.00	1,119.00	407.00	246.00			
	WTU (Weighted Teaching Unit)	142.00	159.90	191.49	125.87	175.20	133.40	3.00			
ANTH	Enrollment										
	FTES (Full Time Equivalent Student)										
	FTEF (Full Time Equivalent Faculty)										

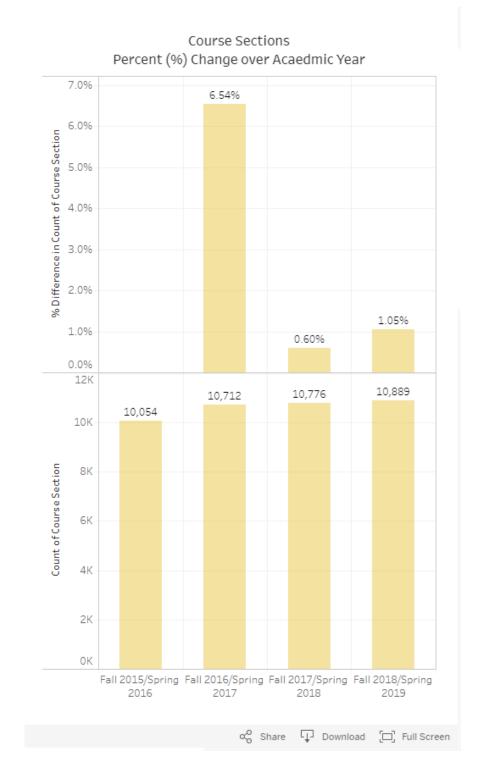
#### HISTORICAL COURSE DETAIL BY COUNT, LEVEL & CLASSIFICATION

The Historical Course Detail report is a new dashboard using the Faculty Course Assignment base data to report information on the courses taught here at Sac State. We can now see how many course sections there are historically by College and by Department. We can do run a percentage difference graph to show the five-year trend.

Subsequently, the Provost, Deans, and College Chairs use these reports for budget allocation, planning and policy decision making.

#### Historical Course Detail by Count, Level & Classification

This report is based on APDB submitted to and approved by the Chancellor's Office on Census Date. This report details the course counts by course level, Course classification (type) by College and Department.

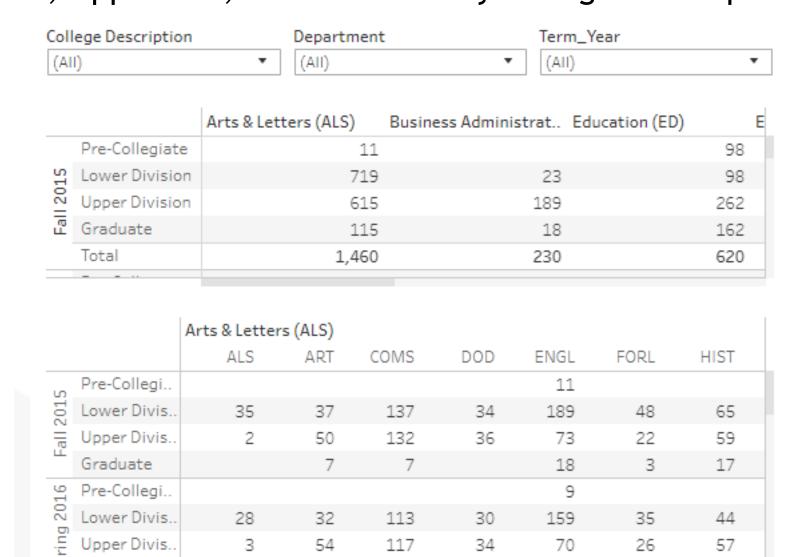


#### HISTORICAL COURSE INFO

The Count of courses by classification gives the campus community and decision makers an idea of the "type" of courses being taught by Department and by College. As you can see from the informational graph, we can easily detect that there are a greater number of Lecture, Discussions and Seminars taught then there are Activity and Lab courses and further, Supervision and Independent Study. Course Planning could use this report for historical use and aid in future course planning.



This Table shows the Course Count by Course Level. The user can find out how many courses taught at Sac State are Pre-Collegiate, Lower Div., Upper Div., and Graduate by College and Department.



#### **CONTRIBUTING INFO**

APDB Summary Faculty and Section Files

California State University, Sacramento Office of Human Resources California State University, Sacramento, Office of Institutional Research

Tableau

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