# Cal Answers Dashboard Training
Student Curriculum

Key Questions Answered by the Student Curriculum Dashboards

Curriculum at a Glance

1. Have course enrollments in a Department grown over the past five years, including in comparison to the Campus as a whole?
2. What is the grade distribution in classes offered by a specific Department?
3. What percentage of classes were at least 90% full in the most recent academic year in comparison to the campus as a whole?
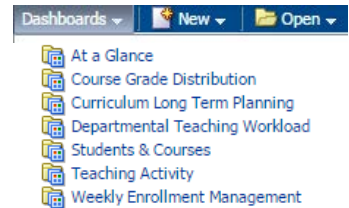
Course Grade Distribution

1. How many students received a letter grade in classes offered by a specific Department?
2. What was the average GPA in courses offered by a specific Department?
3. Do some instructors give lower grades than others? (i.e., what was the average GPA and grade distribution for any class on campus and who taught that class in a given semester)?

Curriculum Long Term Planning

1. What were the course enrollment levels in a specific Department?
2. Did lower-division and upper-division course enrollments grow at the same rate?
3. How many classes were offered by a specific Department?
4. What was the average class size?
5. What was the amount of Student Credit Hours (SCH)?

Departmental Teaching Workload

1. How much teaching activity did an academic unit receive credit for by type of instructor teaching?
2. What was the headcount (HC) of instructors actively teaching?
3. What academic department were an instructor's classes, class enrollments and student credit hours credited to within a given semester?

Berkeley
UNIVERSITY OF CALIFORNIA

Students & Courses

1. What percentage of enrollments (prorated for students with multiple-majors) in courses offered by my unit were by students from within the unit? What percent of prorated enrollments were by students from outside of the unit?
2. Where else on campus are declared students in my Department taking courses? Which specific courses are they taking?

Teaching Activity

1. What type of instructor (e.g., regular faculty, lecturer, graduate student, etc.) taught courses offered by a given Department or Division?
2. What percent of enrollments in a given Department were taught, for example, by Associate Professors?
3. What are the names and job titles of instructors who taught a specific class in a given semester?
4. What are all of the courses taught by a specific instructor over the past five years?

Weekly Enrollment Management

1. How many classes in a specific Department were full on the second week of instruction? Was that number higher or lower than the previous year's?
2. How many students were enrolled in all of the sections of a specific class on the first week of the enrollment period? What percent of all seats were filled? What was the average class size?
3. What were the course enrollment and waitlist counts for every section of a specific course during the first week of instruction?

Updated: 5.07.15

Cal Answers Dashboard Seminar - Questions
Student Curriculum

Directions: Please use the Curriculum dashboards to answer the following questions.

Problem Set 1: Curriculum Long-Term Planning

a) Looking at the time period of years 2008-09 to 2013-14, in which semester (excluding summer sessions) did UCB have the highest enrollment counts in **primary offering** online courses or "web-based lectures?"

b) Which College or School offered the highest number of web-based lectures in that semester?

c) What was the average class size for the web-based lectures offered in that School or College?

d) By what percentage did enrollments in upper-division Physics courses change between the 2004-05 and 2013-14 academic years (excluding summers)? If the answer to this question is not available within Cal Answers, how else can it be calculated?

Problem Set 2: Students & Courses

a) In Spring 2014, what was the percentage of prorated enrollments by Statistics majors in upper-division Statistics courses? What was the percentage of prorated enrollments in these courses by students from outside of the College of Letters & Science?

b) In Spring 2014, prorated enrollments by students from which unit, aside from Letters & Science, accounted for most of the prorated enrollments in upper-division Statistics courses?

c) Prorated enrollments by students from which major in the Division of Social Sciences accounted for most the prorated enrollments in upper division Statistics courses?

d) In Spring 2014, what percentage of enrollments by Statistics majors were in the Haas School of Business? What was the most popular Business course among Statistics majors?

Berkeley
UNIVERSITY OF CALIFORNIA

Problem Set 3: Teaching Activity

a) Which tab would you use to find out what type of instructors are teaching courses offered by an academic department?

b) How many of the upper division Statistics course enrollments were taught by Adjunct or Visiting faculty in Fall 2013 and Spring 2014?

c) Does that mean that more Adjunct or Visiting faculty taught in Spring 2014 compared to Fall 2013 or that they taught more courses?

d) Were these two courses, Stat 155 in Fall 13 and Stat 134 in Spring 14, taught by the same visiting or adjunct instructor?

e) Did this instructor ever teach any other courses at UC Berkeley?

Problem Set 4: Weekly Enrollment Management

a) Go to the Course Tracking tab. Set the Course Subject to Physics. Set the snapshot to Fall 2013 Week -07. Click "Apply." Look at the table. Which columns are missing data? Now set the snapshot for Fall 2013 Week -06. Click "Apply." What happened to the empty columns in the lower table? Why?

b) Look at Spring 2013 lower-division primary Mathematics courses. Which courses were in high demand in the earliest week for which we have data? How can you tell which courses were in high demand?

c) For those courses, what do the Offerings Cnt and Average Class Size compared to the prior year tell you about how the Department met the high demand?

d) Go to the Class Tracking tab. Look at Spring 2013 Wk-06. View the chart at the bottom of the page, and look at the enrollment pattern for Lecture 002 of Math 1B. Was this section in high demand? How did the Department address that?

Berkeley
UNIVERSITY OF CALIFORNIA

Cal Answers Dashboard Seminar – Answer Key
Student Curriculum

- -

Directions: Please use the Curriculum dashboards to answer the following questions.

- -

Problem Set 1: Curriculum Long-Term Planning

a) **Looking at the time period of years 2008-09 to 2013-14, in which semester (excluding summer sessions) did UCB have the highest enrollment counts in online courses or "web-based lectures?"** Spring 2014

b) **Which College or School offered the highest number of web-based lectures in that semester?**

School of Public Health

Updated: 5.07.15

c) What was the average class size for the web-based lectures offered in that School or College?

Average class size of web-based lectures in the School of Public Health: 34

d) By what percentage did enrollments in upper-division Physics courses change between the 2004-05 and 2013-14 academic years (excluding summers)? If the answer to this question is not available within Cal Answers, how else can it be calculated?

(1698-1327)/1327 = 0.2796 = 28%

Updated: 5.07.15

Problem Set 2: Students & Courses

a) **In Spring 2014, what was the percentage of prorated enrollments by Statistics majors in upper-division Statistics courses? What was the percentage of prorated enrollments in these courses by students from outside of the College of Letters & Science?**

35% of the prorated enrollments were by Statistics majors.
11% of the prorated enrollments were by majors from outside of the College.
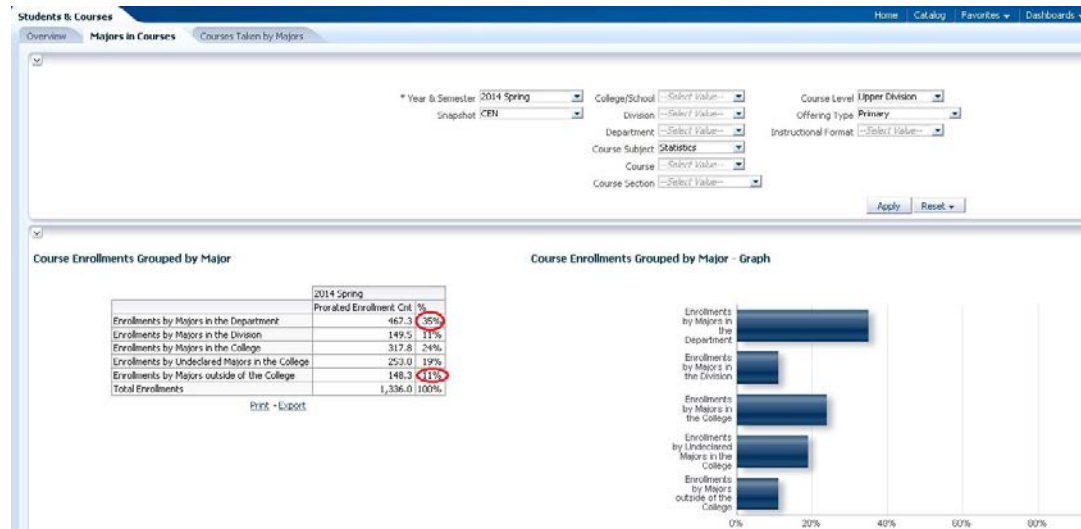
b) **In Spring 2014, prorated enrollments by students from which unit, aside from Letters & Science, accounted for most of the prorated enrollments in upper-division Statistics courses?**

The College of Engineering

	2014 Spring
Reporting Clg School Short Nm - Major	Prorated Enrollment Cnt
-	1.0
Clg of Chemistry	9.0
Clg of Engineering	76.5
Clg of Env Design	3.0
Clg of Letters & Science	1,187.7
Clg of Natural Resources	40.0
Haas School of Business	16.8
School of Public Health	2.0
Total	**1,336.0**

Semester Year Name Concat is equal to **2014 Spring**
and Include Sb Week Desc is equal to **CEN**
and Course Subject Short Nm is equal to **Statistics**
and Course Level1 Rollup Nm is equal to **Upper Division**
and Offering Type Desc is equal to **Primary**

Print - Export

Updated: 5.07.15

Berkeley
UNIVERSITY OF CALIFORNIA

c) Prorated enrollments by students from which major in the Division of Social Sciences accounted for most of the prorated enrollments in upper division Statistics courses?

Economics

Reporting Clg School Short Nm - Major	Academic Division Short Nm - Major	Academic Department Short Nm - Major	2014 Spring Prorated Enrollment Cnt
Clg of Letters & Science	L&S-Social Sciences Div	Anthropology	1.0
		Economics	165.7
		Ethnic Studies	1.5
		Geography	1.3
		Linguistics	2.0
		Political Science	6.0
		Psychology	10.8
		Sociology	2.0
Total			**190.3**

d) In Spring 2014, what percentage of enrollments by Statistics majors were in the Haas School of Business? What was the most popular Business course among Statistics majors?

10.5% of enrollments by Statistics majors were in courses offered by the Haas School of Business.

Students & Courses

Overview | Majors in Courses | Courses Taken by Majors

* Year & Semester 2014 Spring   College/School - Major --Select Value--   Undergrad/Grad Undergraduate
Snapshot CEN   Division - Major --Select Value--   Course Level Lower Division;Up
Department - Major Statistics   * Offering Type Primary
Major --Select Value--

Apply   Reset

Majors' Enrollments by Course

Crs Rpt College Schl Shrt Nm	2014 Spring Enrollment Cnt	Percent
Clg of Chemistry	8	0.4%
Clg of Engineering	197	11.0%
Clg of Env Design	6	0.3%
Clg of Letters & Science	1,290	71.7%
Clg of Natural Resources	44	2.4%
Goldman School Pub Pol	9	0.5%
Grad School of Education	5	0.3%
Grad School of Journalism	1	0.1%
Haas School of Business	189	10.5%
I School	1	0.1%
School of Law	5	0.3%
School of Optometry	2	0.1%
School of Public Health	42	2.3%
Grand Total	**1,799**	**100.0%**

Business 103 – Intro to Finance was the Haas course with the most enrollments by Statistics majors.

Course Subject Short Nm	Course Number	Course Title Nm	2014 Spring Enrollment Cnt
Business Admin-Undergrad	98	Directed Group Stdy	1
	100	Business Comm	5
	101A	Microeconomic Analy	6
	101B	Macroeconomics	7
	102A	Intro Fin Account	9
	102B	Intro Manager Acct	18
	103	Intro To Finance	38
	104	Sprdsheetmodeling	4
	105	Leading People	6
	106	Marketing	6
	107	Soc & Pol Eth Env	5
	120AA	Int Fin Acct 1	1
	120AB	Int Fin Accnting 2	10
	120B	Adv Fin Accounting	4
	121	Fed Inc Tax Acctg	4
	122	Fin Info Analysis	6
	126	Auditing	1
	131	Corp Fin Analysis	1
	132	Fin Instit & Mrkts	6
	133	Investments	9
	137	Spec Topics In Fin	2
	141	Prod & Oper Mgmt	3
	152	Negotiation	1
	155	Leadership	1
	165	Advertise Strategy	1
	170	Ethical Leadership	1
	183	Intro Real Est Fin	2
	190T	Topics Innov/Design	1
	192N	Topics In Nonprofit	2
	193I	Business Abroad	1
	194	Colloq Bus Topics	3
	196	Spec Topics Bus Adm	14
	198	Directed Group Stdy	10
			189

Updated: 5.07.15

Berkeley
UNIVERSITY OF CALIFORNIA

Problem Set 3: Teaching Activity

a) **Which tab would you use to know what type of instructors are teaching courses offered by an academic department?**

Teaching Activity by Instructor Type, which provides a summary of the types of instructors who taught courses offered by a given Department.

b) **How many of the upper division Statistics course enrollments were taught by Adjunct or Visiting faculty in Fall 2013 and Spring 2014?**

Adjunct and Visiting faculty are classified under the Other Faculty category.
Fall 2013: 69, Spring 2014: 290

c) Does that mean that more Adjunct or Visiting faculty taught in Spring 2014 compared to Fall 2013 or that they taught more courses?

Maybe, but not necessarily. The same number of instructors might have taught larger courses. Drill down on the academic department level until you see the course numbers. This shows that instructors in this category taught one course in Fall 2013 (Stat 155) and one course in Spring 2014 (Stat 134).

d) Were these two courses, Stat 155 in Fall 13 and Stat 134 in Spring 14, taught by the same visiting or adjunct instructor?

Use the Instructor List by Course tab to see a list of instructors who taught these courses.
Yes, they were both taught by Antar Bandyopadhyay.

Updated: 5.07.15

e) Did this instructor ever teach any other courses at UC Berkeley?

No, this instructor only taught in Fall 2013 and Spring 2014.

Instructor Name	HCM Home Dept	Crosslisted Course Flag	Course Subject Short Nm	Course Number	Course Title Nm	Pct of Instructor Hrs Taught	2013 Fall	2014 Spring
Antar Bandyopadhyay	Statistics		Statistics	134	Concepts Of Prob	100%		290.00
				155	Game Theory	100%	69.00	
Grand Total							**69.00**	**290.00**

Problem Set 4: Weekly Enrollment Management

a) Go to the Course Tracking tab. Set the Course Subject to Physics. Set the snapshot to Fall 2013 Week -07. Click "Apply." Look at the table. Which columns are missing data? Now set the snapshot for Fall 2013 Week -06. Click "Apply." What happened to the empty columns in the lower table? Why?

In the snapshot of Week -07 there is no data in all of the columns for Prior Year.
For the snapshot of Week-06, there is now data in the columns for Prior Year. The reason is that those columns display historical data. However, we only have historical data going back to Fall 2011 and only starting with Week -06.

In Fall 2013, we began capturing data starting in Week -19 onwards, when Tele-BEARS opened for Fall of 2013.

b) Look at Spring 2013 lower-division primary Mathematics courses. Which courses were in high demand in the earliest week for which we have data? How can you tell which courses were in high demand?

Start by sorting the % Class Filled column to see the classes that were fullest. Also look at how full these classes were at the same time in the prior year. Math 1A, 32, 1B and 53 were fuller in Spring 2013 than in Spring 2012. The % full metric is calculated by dividing the enrollment count by the enrollment limit. Math 1A had 38 additional seats in Spring 2013 while Math 32 had half the seats compared to the previous year. Since the enrollment limit for Math 32 is significantly lower than in the previous year, we cannot say that it experienced high demand simply because it was fuller in Spring 2013. Other important factors are the count of students on the waitlist and the number of rejected students. Math 32 had no students on the waitlist and was only 39% full in Spring 2012. In response, the Department cut the number of seats in half for Spring 2013, but then there were 20 students on the waitlist.

Updated: 5.07.15

Course Number	Course Title Nm	Offering Type Desc	Instructional Format Nm	Offerings Cnt	Offerings Cnt Prior Yr	Offerings Cnt EOT Prior Yr	Enrollment Limit	Enrollment Limit Prior Yr	Enrollment Cnt	Enrollment Cnt Prior Yr	Enrollment Cnt EOT Yr	Enrollment Cnt EOT Prior Yr	% Class Filled	% Class Filled Prior Yr	Waitlist Cnt	Waitlist Cnt Prior Yr	Rejected Student Cnt	Rejected Student Cnt Prior Yr	Avg Class Size	Avg Class Size Prior Yr
ics 1A	Calculus	Primary	Lecture	1	1	1	238	200	238	179	202	100	90	50	5	83	0.00	238	179
ics 32	Precalculus	Primary	Lecture	1	1	1	50	100	50	39	38	100	39	20	0	30	0.00	50	39
ics 55	Discrete Math	Primary	Lecture	1	1	1	185	125	175	125	174	95	100	37	23	0	13.00	175	125
ics 1B	Calculus	Primary	Lecture	3	3	3	1,008	1,036	899	687	897	89	66	131	36	383	167.00	300	229
ics 16A	Anal Geo & Calculus	Primary	Lecture	1	1	1	440	425	375	368	428	85	87	29	2	0	0.00	375	368
ics 53	Multivar Calculus	Primary	Lecture	2	2	2	696	592	573	414	633	82	70	61	8	0	0.00	287	207
ics 16B	Anal Geo & Calculus	Primary	Lecture	2	2	2	911	911	750	841	1,054	82	92	51	35	0	0.00	375	421
ics 54	Lin Alg & Diff Eqns	Primary	Lecture	2	2	2	930	811	743	713	966	80	88	100	48	0	0.00	372	357
ics 24	Freshman Seminars	Primary	Seminar	2	2	2	35	27	26	26	21	74	96	0	0	5	11.00	13	13

c) **For those courses, what do the Offerings Cnt and Average Class Size compared to the prior year tell you about how the Department met the high demand?**

The number of offerings remained the same, but the number of enrollments increased. This means that the average class size also increased. It suggests that the Department increased the number of secondary sections to meet the increased demand. This can be verified by changing the Offering Type filter to Secondary and comparing the number of offerings to last year's.

13

d) **Go to the Class Tracking tab. Look at Spring 2013 Wk-06. View the chart at the bottom of the page, and look at the enrollment pattern for Lecture 002 of Math 1B. Was this section in high demand? How did the Department address that?**

This section had approximately 50 students on the waitlist for the first six weeks of the course enrollment period. To accommodate those students, the Department started increasing the enrollment limit one week prior to the beginning of the semester. The limit was increased twice within two weeks, and very few students remained on the waitlist. Note that not all of the students removed from the waitlist necessarily enrolled in this section. Some of them might have chosen to take another section or another course altogether.

Updated: 5.07.15

Berkeley
UNIVERSITY OF CALIFORNIA

Cal Answers Dashboard Training
Student Curriculum-Glossary

Average Class Size

Average Class Size is the mean of the total enrollment counts for all of the selected course sections (classes).

Class Share
This is the number of classes taught by instructors for a credited (or pay) department. It is pro-rated for team teaching, where the class is divided according the number of instructor hours taught per week for each member of the teaching team. In the case of cross-listed and roomshared classes, the bundle of listings is equal to one class so the instructor(s) will receive a fraction of a class for each listing which will total to 1 for the bundle. An instructor associated with the class must be teaching in order to receive their share of the class credit.

Cross-Listed Course

Cross-listed courses are offered jointly by more than one department. These courses must have identical title, description, instructional format, grading option, units, final exam status, and University and campus requirement status. Prerequisites and restrictions may differ. If a course is officially cross-listed, it's considered a single course where all parts must be offered. The Academic Senate defines officially cross-listed courses.

Course Level

There are three Course Levels: Lower Division (LD) undergraduate, Upper Division (UD) undergraduate, and Graduate (GR). Lower Division courses are introductory in nature and are intended for freshmen and sophomores. LD courses are numbered 0-99 (e.g., Math 1A). Upper Division courses are more specialized than Lower Division ones and are intended for juniors and seniors. UD courses are numbered 100-199 (e.g., English 135). Graduate courses are intended for students in Masters, PhD, and Professional programs and are numbered 200 or higher (German 205).

Course Offering

See Course Section

Berkeley
UNIVERSITY OF CALIFORNIA

Course Section

An instance of a course offered during a particular semester (also referred to as "class"). Many courses are listed in the catalog, but not all of them are offered every semester. When a course is offered, it becomes a section, which has a meeting time, location, and instructor. There are different types of course sections (Offering Type), such as primary, secondary, and independent study. Course sections also have different instructional formats, such as lecture, laboratory, studio, etc.

Discussion Section

An instructional format of a secondary section. Many large lecture sections have associated discussion sections, which are much smaller (~20 students) and are typically used for discussing reading assignments and topics covered during the lecture.

Enrollment Limit

Enrollment Limit is the maximum number of students allowed in a course section (class) in a particular semester. This can vary from one semester to the next and is set by the department listing the course.

Instructional Format

Instructional Format indicates the method of instruction used in a course section (class) and by inference, the levels of the required student and faculty participation. Examples of instructional formats include lecture, seminar, discussion, laboratory, web-based (online).

Instructor Headcount

This is a headcount (HC) of instructors that were actively teaching and whose teaching activity is recorded in the Departmental Teaching Workload dashboard.

Offering Type

There are three types of course offerings: primary, secondary, and independent study. Primary sections are regularly-scheduled sections (classes), including lectures, seminars, etc. Secondary sections are always associated with a primary class and include discussions, labs, etc. Not all primary sections have secondary sections, but all secondary sections are tied to primary sections. Independent study classes are individualized educational activities supervised by an instructor. Grades and student credit hours are only associated with primary and independent study offerings. Official grades are never awarded for secondary sections.

OLADS

The Online Add/Drop System used by departments to make changes to student course enrollments once Tele-BEARS is no longer available.

Prorated Enrollment Cnt

This is a count of class enrollments by the enrolled student's major program. For a student with multiple majors, the seat in the class that they are enrolled in is divided or prorated amongst their affiliated major programs. For example the enrollment seat in a Math 1A class that is taken by a student who is a double major in Applied Mathematics and Physics will count as an enrollment of .5 Math and .5 Physics. When Math looks at their course offerings and wants to know how many of the students enrolled in Math 1A are from their major they will get a prorated count of .5 for that student and .5 would be counted in the Physics Major which is not in the same department but is in the same division as the course offering unit which is Mathematics.

Rejected Student

A student who tried to enroll in a course section but was not allowed to because they did not meet the enrollment criteria or the section was already full. The Rejected Student Cnt field is an unduplicated count of students who were rejected for a given section at a given snapshot week. This metric is useful for determining demand.

Roomshare Bundle ID

The roomshare bundle id number is generated by Cal Answers and is only unique to a semester. This ID allows Cal Answers to use the same ID to tag listings in the same cross-listed or roomshared bundle so that the system can support reporting by bundle as well as individual listings. All classes are tagged with this ID. In the case of classes that are not crosslisted or roomshared, this ID is the same as the class CCN. For cross-listed and roomshared bundles this ID will be a number different from the class's CCN and will repeat the same ID for each listing in a bundle.

Roomshared Class

Roomshared classes occur at the same place, day and time as another class section in a given semester. Cal Answers checks all class sections in a given semester to identify roomshared classes. Cal Answers does not consider studios, clinics, or labs to be roomshared unless they have been designated as cross-listed by the academic senate. Roomshared classes are sometimes referred to as "unofficial cross-listed courses".

Berkeley
UNIVERSITY OF CALIFORNIA

Snapshot

Snapshot refers to a particular point in time at which Cal Answers extracted data from a source system. "CEN" is the census snapshot that happens every Fall and Spring semester on the 25th day of instruction (10th day of instruction for Summer sessions), which is also the deadline for undergraduates to add/drop classes. At the census, most enrollment activity has frozen for the remainder of the semester (with the exception of graduate students, who are able to drop classes up to the final day of instruction). Therefore, the CEN snapshot is often used by default. However, there are other snapshots that are useful for particular analyses, such as End-of-term (EOT), which typically includes students who were too late to be included in the census and graduate students enrollment activity that occurred after the census. The Curriculum subject area also includes weekly snapshots for the entire duration of the courses enrollment period.

Tele-BEARS

Tele-BEARS is Berkeley's online course enrollment system. It will be replaced in the next few years with the new Student Information System (SIS).

Waitlist

If the Enrollment Limit of a course section has been reached or if enrollment restrictions have been set by the listing department, students have the option to place their names on the waitlist. Some waitlists are processed automatically (i.e., if space becomes available, the first student on the list is enrolled in the class) or manually (i.e., if space becomes available, the listing department chooses whom from the waitlist to enroll). Waitlists can also fill up. See Waitlist Limit.

Waitlist Limit

Waitlist Limit is the maximum number of students that can be on the waitlist for a class.

Berkeley
UNIVERSITY OF CALIFORNIA