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?
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?
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 of 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?
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?
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
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?

\[
\frac{(1698-1327)}{1327} = 0.2796 = 28\%
\]
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
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**

<table>
<thead>
<tr>
<th>Major</th>
<th>2014 Spring Prorated Enrollment Count</th>
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<tbody>
<tr>
<td>Anthropology</td>
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<td>Economics</td>
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<td>Ethnic Studies</td>
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<td>Geography</td>
<td>1.3</td>
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<tr>
<td>Linguistics</td>
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<td>Political Science</td>
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<td>Psychology</td>
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<tr>
<td>Sociology</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>198.3</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course Subject Short Nm</th>
<th>Course Number</th>
<th>Course Title Nm</th>
<th>Enrollment Cnt</th>
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<td>100</td>
<td>Business Comm</td>
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<td>101A</td>
<td>Microeconomic Analy</td>
<td>6</td>
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<td></td>
<td>101E</td>
<td>Macroeconomics</td>
<td>7</td>
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<tr>
<td></td>
<td>102A</td>
<td>Intro Fin Account</td>
<td>9</td>
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<td></td>
<td>102B</td>
<td>Intro Manager Acct</td>
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<td>103</td>
<td>Intro To Finance</td>
<td>38</td>
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<td></td>
<td>104</td>
<td>Spreadsheets modeling</td>
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<td>105</td>
<td>Leading People</td>
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<td>106</td>
<td>Marketing</td>
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<td>Soc &amp; Pol Eth Env</td>
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<td>120AA</td>
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<td>Intro Real Est Fin</td>
<td>2</td>
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<td></td>
<td>190T</td>
<td>Topics Innov/Design</td>
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<td></td>
<td>192N</td>
<td>Topics In Nonprofit</td>
<td>2</td>
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<td>193I</td>
<td>Business Abroad</td>
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<td></td>
<td>194</td>
<td>Cololq Bus Topics</td>
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<td>196</td>
<td>Spec Topics Bus Adm</td>
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</tr>
<tr>
<td></td>
<td>198</td>
<td>Directed Group Study</td>
<td>10</td>
</tr>
</tbody>
</table>

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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).

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**Updated: 5.07.15**

![Image](image.png)

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

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

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.
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.

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.
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

Updated: 5.07.15
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".
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.