



Faculty to Student Ratio Guide

The following guide provides assistance in running and understanding the information returned by the Faculty to Student Ratio dashboard in Argos. The dashboard is located through the Argos reporting tool which can be accessed here: <https://it.uca.edu/banner/>.

Contents

I. Locating and Accessing the Dashboard.....	2
II. Running the Dashboard	5
III. Interpreting the Dashboard	6
IV. Manipulating OLAP Cubes	7
A. Sorting	7
B. Adding/Removing Dimensions	8
C. Filtering.....	9
D. Exporting to Excel.....	10

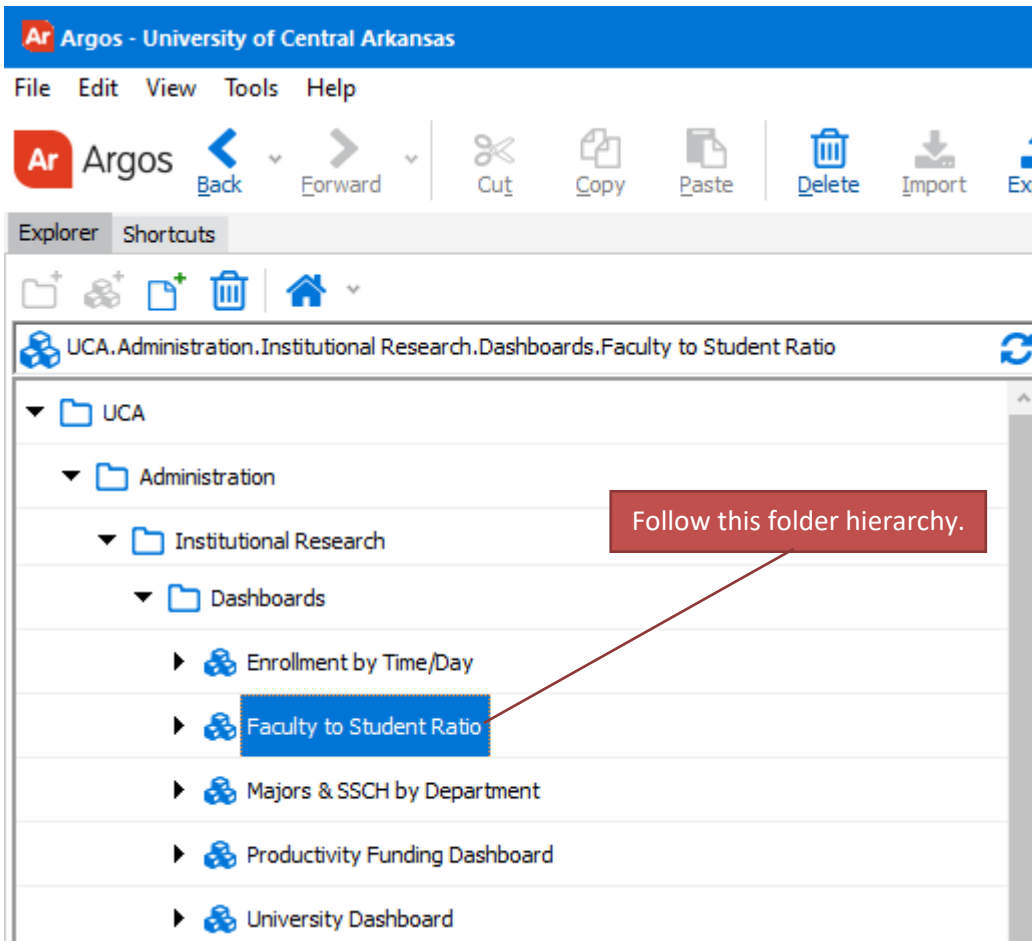
I. Locating and Accessing the Dashboard

To locate the dashboard, navigate to <https://it.uca.edu/banner/>. Click the “Argos (PROD)” hyperlink as highlighted below and then log in.

The screenshot shows the 'Banner Links Page' with the following structure:

Banner 9		Banner 8 Self-Service	
Admin Pages Admin Pages [PROD] Admin Pages [TEST] Admin Pages [PPRD] Admin Pages [CONV]	Banner Communication Management Communication Management [PROD] Communication Management [PPRD] Communication Management [CONV]	Direct Access Production Database [PROD] Test Database [TEST] Pre-Production Database [PPRD] Conversion Database [CONV]	Single Sign-on Production Database [PROD] Test Database [TEST] Pre-Production Database [PPRD] Conversion Database [CONV]
Banner 9 Self-Service		AppWorx	Evisions
General [PROD] General [TEST] General [PPRD] General [CONV]	Faculty [PROD] Faculty [TEST] Faculty [PPRD] Faculty [CONV]	AppWorx Client Installation	Argos [PROD] Argos Web Viewer [PROD] FormFusion [PROD] IntelleCheck [PROD]*
Student [PROD] Student [TEST] Student [PPRD] Student [CONV]	Finance [PROD] Finance [TEST] Finance [PPRD] Finance [CONV]		Argos [DEV] Argos Web Viewer [DEV] FormFusion [DEV] IntelleCheck [DEV]*

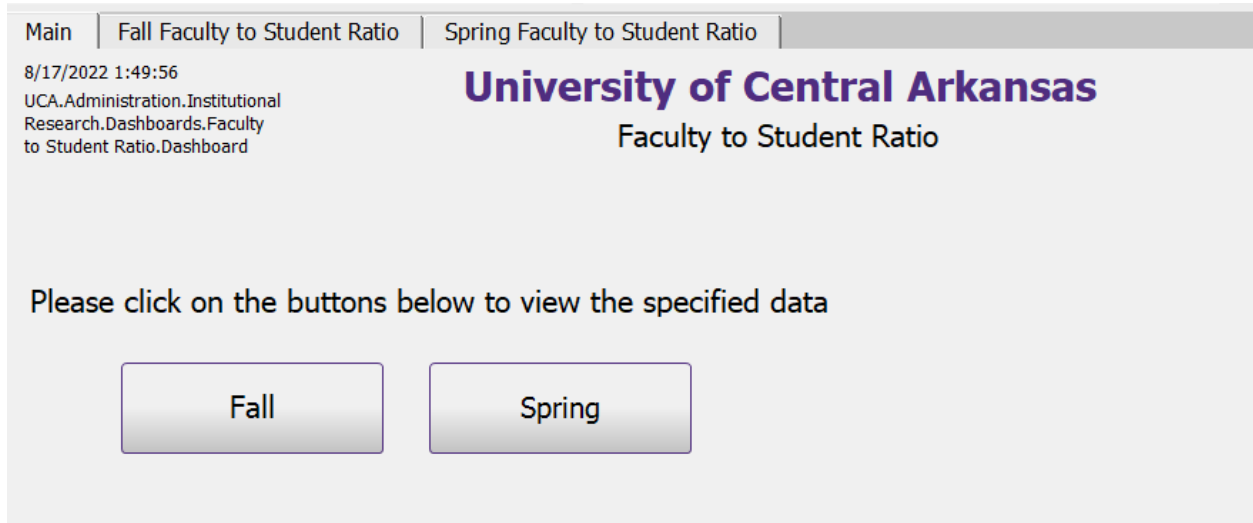
The dashboard is located at *UCA.Administration.Institutional Research.Dashboards.Faculty to Student Ratio*. Navigate through the folder hierarchy to find the dashboard.



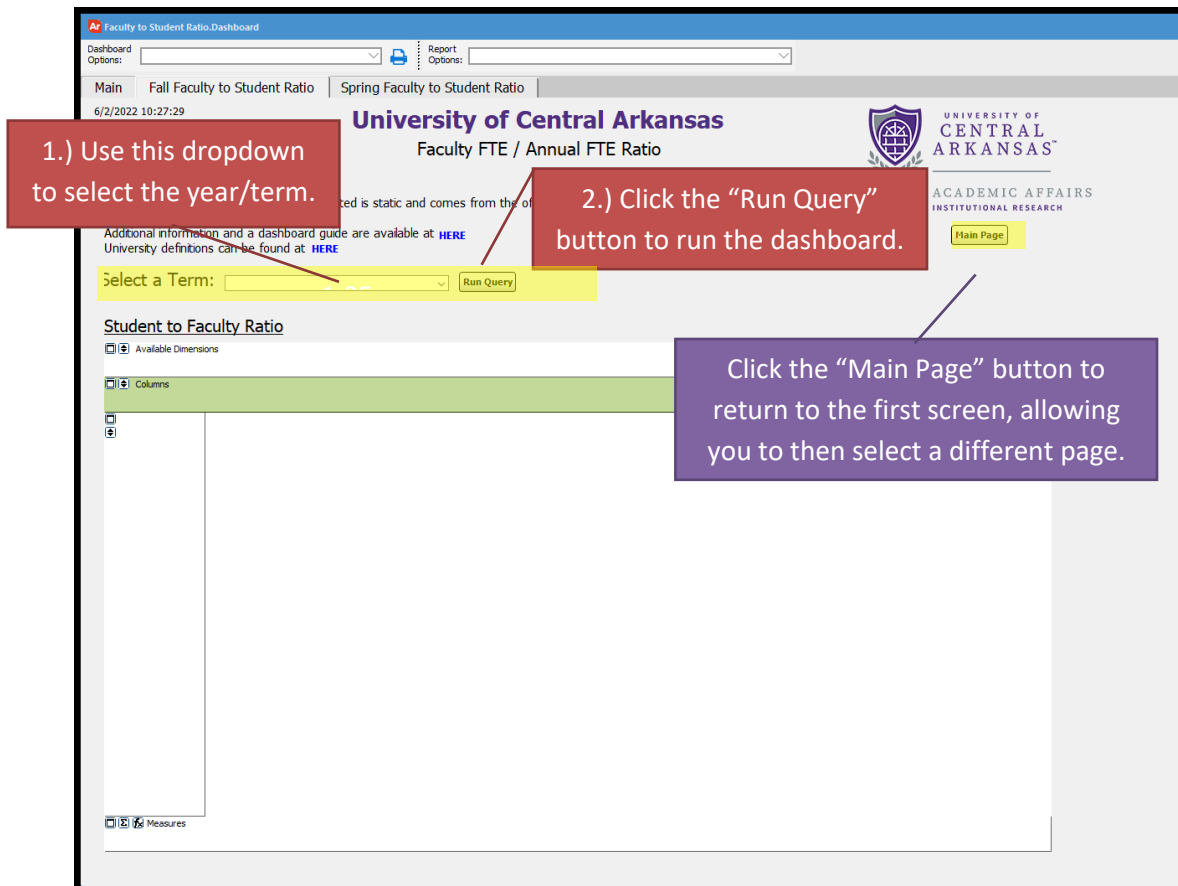
The following screen will appear to the right of the navigation tree. Click the “Run Dashboard” button to view the dashboard.

II. Running the Dashboard

After clicking the “Run Dashboard” button, the dashboard’s main page will appear.



Clicking on a button will take you to the specific page. You can also click on the tabs at the top of the page. The pages will either show the faculty to student ratio for the fall semester or spring semester.



III. Interpreting the Dashboard

The college and department in the report is based on the college and department that a faculty member is assigned to.

A full-time faculty member counts as 1.0 FTE. For each part-time faculty member, we use the percentage of employment that is reported to Human Resources to determine the FTE. If a part-time faculty member is 25% then they are 0.25 FTE.

Student FTE is based off the courses that the faculty member teaches. Student FTE is calculated by a standard methodology explained on IR's [enrollment definitions website](#).

Example 1:

A full-time faculty member teaches courses that generate 23.0 student FTE. For that one faculty member, they are 23.0 student to 1.0 faculty ratio.

Example 2:

We have two faculty members for a department:

- (1) A part-time faculty member, who is employed 25%, generates 1.6 student FTE.
- (2) A full-time faculty member generates 23.0 student FTEA

	Student FTE	Faculty FTE
	1.6	0.25
	23.0	1.00
Total	24.6	1.25

Take the 24.6 and divide by 1.25, so now you get 19.68 students to 1.0 faculty for the department.

IV. Manipulating OLAP Cubes

OLAP stands for Online Analytical Processing. OLAP cubes are data structures that allow the end user to configure (“slice and dice”) the same data into many different views. They are designed to aid in decision-making and better understanding of information. Similar to pivot tables within Excel, the end user can add/remove variables (dimensions) as well as filter and sort the data to drill down into the details or generalize to see the big picture.

Note:

For a more comprehensive explanation of OLAP Cubes please refer to the Argos In-Product Help Guide:

http://webhelp.evisions.com/HelpFiles/Argos/5.3/en/Default.htm#Report%20Viewer%20Guide%20OLAP.htm%3FTocPath%3DUser%2520Guides%7CReport%2520Viewer%2520Guide%7COLAP%2520Data%2520Cubes%7C_0

A. Sorting

The screenshot displays an OLAP cube interface. At the top, there is a dropdown menu for "Select a Term" set to "Fall 2016" and a "Run Query" button. Below this, there are sections for "Available Dimensions" (Department, Level, Classification, Minority, College) and "Columns" (ADHE_Term, Gender). The main data table is a pivot table with "Race" as the row dimension and "Students" as the column dimension. The columns are grouped by year (Fall 2012, Fall 2013, Fall 2014, Fall 2015, Fall 2016) and a "Total by ROWS" column. Each cell in the table contains a numerical value. A purple callout box points to the +/- symbols in the column headers, stating "Hit the +/- symbol to expand/contract the information". A red callout box points to the vertical and horizontal arrows in the table cells, stating "Click the vertical or horizontal arrows to sort the rows/columns ascending or descending".

Race	Fall 2012		Fall 2013	Fall 2014	Fall 2015	Fall 2016	Total by ROWS	
	Female	Male	Students	Students	Students	Students	Students	
American Indian/Alaskan Native	67	47	20	63	55	59	58	302
Asian	170	84	86	160	185	194	218	927
Black	1,942	2,011	1,913	1,788	1,913	1,788	1,788	9,451
Hispanic	373	452	484	540	484	540	540	2,174
NR Alien	489	575	606	630	630	630	630	2,828
Native Hawaiian/Pacific Islander	14	11	12	12	12	12	12	58
Two or more races	284	352	372	372	372	368	368	1,591
Unknown	317	142	117	117	117	75	75	998
White	7,892	7,915	7,997	7,997	7,997	7,801	7,801	39,251
Total by COLUMNS	11,534	11,698	11,754	11,754	11,754	11,487	11,487	57,580

B. Adding/Removing Dimensions

Editing the dimensions of the OLAP cube allows the user to view the data grouped in different ways. In the following example, the OLAP cube first displays enrollment data by Fall term. Dragging and dropping the necessary dimensions edits the OLAP cube to display the enrollment data split out by race/ethnicity and gender for each Fall term.

Select a Term:

Available Dimensions: Department, Level, Classification, Gender, Minority

Columns: ADHE_Term

	Fall 2012	Fall 2013	Fall 2014
Students			
Value	11,107	11,534	11,698

Drag and drop dimensions from the available dimensions area to the columns or rows area to add dimensions.

Drag and drop dimensions from the columns or rows area to the available dimensions area to remove dimensions.

This is what the OLAP cube looks like after moving the gender and race dimensions:

Select a Term:

Available Dimensions: Department, Level, Classification, Minority, College

Columns: ADHE_Term, Gender

Rows: Race

Race	Fall 2012			Fall 2013			Fall 2014		
	Students	Female	Male	Students	Female	Male	Students	Female	Male
American Indian/Alaskan Native	67	47	20	63	55	59	58		302
Asian	170	84	86	160	185	194	218		927
Black	1,797	1,101	696	1,942	2,011	1,913	1,788		9,451
Hispanic						484	540		2,174
NR Alien						606	630		2,828
Native Hawaiian/Pacific Islander						12	9		58
Two or more races						372	368		1,591
Unknown						117	75		998
White				7,997	7,801				39,251
Total by COLUMNS				11,754	11,487				57,580

With the Gender dimension in the column area, the different gender categories are displayed horizontal along the top of the OLAP cube

With the Race dimension in the row area, the different race categories are displayed vertically along the left side of the OLAP cube

C. Filtering

Dimensions can be filtered to show only the user's chosen categories. A dimension **does not** need to be in the column and row areas to be filtered; it can be filtered from the available dimension area as well. For example, the user can click on the department dimension in the available dimensions area and filter it to show only enrollment for their department.

In the following example, the College dimension is being filtered (the dimension has changed from a gray box to a red box). Within the dimension editor:

- The Graduate School category has been removed (red crossed circle to the left of the category).
 - This category will not be visible in the OLAP cube nor will it be displayed in the totals.
- The Undeclared category has been changed to invisible (blue eye to the left of the category) in the dimension editor.
 - This category will not be visible in the OLAP cube but it *will* be displayed in the totals.
- All other categories were left with the default visible option (green eye to the left of the category) in the dimension editor.
 - These categories will be visible in the OLAP cube and will be displayed in the totals.

Select a Term: Fall 2016 Run Query Main Page

Available Dimensions: Department, Level, Classification, Gender, Minor

Columns: ADHE_Term, College, Students, Value

College	Students	Value
Business	522	1
Education	778	1
Fine Arts and Communication	893	1
Health and Behavioral Sciences	2,640	2
Liberal Arts	723	1
Natural Sciences and Mathematics	1,163	1
Undergraduate Studies	20	1
Total by COLUMNS	11,073	11

Dimension editor: College

Caption: College

Enable prev. forecast value Forecasting method: Triple Exponential S

Enable next forecast value

- Business
- Education
- Fine Arts and Communication
- Graduate School
- Health and Behavioral Sciences
- Liberal Arts
- Natural Sciences and Mathematics
- Undeclared
- Undergraduate Studies

Items count: 9

1) Click the down arrow next to the dimension to bring up the Dimension Editor menu

2) Click the green checkmark to save your selection

The green eye means that category is visible and included in the totals

The red crossed circle means that the category is not visible and not included in the totals

The blue eye means that category is not visible but is included in the totals

To see examples of filtering an OLAP refer to Argos YouTube videos:

<https://youtu.be/kYwXgRRcAuM>

<https://youtu.be/ALmaNsYLk7M> (starting at minute 1:30)

D. Exporting to Excel

After manipulating an OLAP cube, the data can be extracted to an Excel file for further manipulation or for adding into a report.

The screenshot shows an OLAP interface with the following components:

- Select a Term:** A dropdown menu set to "Fall 2016" and a "Run Query" button.
- Available Dimensions:** A list of dimensions including Level, Classification, Race, College, and ADHE_Term.
- Columns:** A list of columns including Minority and Gender.
- Data Table:** A table with columns for Department, Minority (Gender: Female, Male), Non-Minority (Gender: Female, Male), and Total by ROWS (Students). The data is as follows:

Department	Minority			Non-Minority			Total by ROWS
	Students	Female	Male	Students	Female	Male	
Biology	200	124	76	596	353	243	796
Chemistry	53	32	21	159	92	67	212
Computer Science	75	14	61	270	30	240	345
Geography	9	3	6	69	20	49	78
Mathematics	23	16	7	107	42	65	130
Physics & Astronomy	14	2	12	70	11	59	84
Total by COLUMNS	374	191	183	1,271	548	723	1,645
- Export to Excel Menu:** A context menu is open, showing options: Export to Excel, Saved OLAP Settings, Undo (Ctrl+Z), Cut (Ctrl+X), Copy (Ctrl+C), Paste (Ctrl+V), Print ..., and Select All (Ctrl+A).

Annotations:

- A purple box points to the "Run Query" button with the text: "The Excel document will contain what is currently shown in the OLAP cube, including selected filters."
- A red box points to the context menu with the text: "Right click anywhere within the OLAP cube to display the options menu. Choose Export to Excel (OLE)"

The OLAP cube data will display in Excel exactly as it was displayed in the OLAP cube within Argos. The OLAP cube does not import as an image but as a general data format so that it can be manipulated further in Excel as needed.

The screenshot shows an Excel spreadsheet with the following data table:

	Minority	Minority		Non-Minority			Total by ROWS	
	Gender	Female	Male	Students	Female	Male	Students	
	Department	Students	Students	Students	Students	Students	Students	
		Value	Value	Value	Value	Value	Value	
5	Biology	200	124	76	596	353	243	796
6	Chemistry	53	32	21	159	92	67	212
7	Computer Science	75	14	61	270	30	240	345
8	Geography	9	3	6	69	20	49	78
9	Mathematics	23	16	7	107	42	65	130
10	Physics & Astronomy	14	2	12	70	11	59	84
11	Total by COLUMNS	374	191	183	1,271	548	723	1,645