Using Catamount Data to Monitor Adjusted Cohorts Outcomes and Student Workload

Larry Granillo & Jimmy Huynh Office of Institutional Research May 20, 2020



# Agenda

- Introduction
- OIR & Catamount Data
- New Dashboards
  - Adjusted Cohorts Outcomes
  - Student Curriculum Matrix
  - Instructor Interdisciplinary Matrix
- Reminders & Questions

## Office of Institutional Research

- Responsible for UVM's official institutional data and statistics regarding students, faculty, and staff
- Provide data and analysis to departments, colleges, administration, committees and more
- Our goal is to provide you with the data and analysis you need in order to make data-informed decisions

## **OIR & Catamount Data**

- Website: https://www.uvm.edu/oir
- Catamount Data: making data easily available (public and restricted data)
- Submit a Data Request! https://www.uvm.edu/oir/data -requests



#### UVM OFFICE OF INSTITUTIONAL RESEARCH



The Office of Institutional Research (OIR) gathers, analyzes, interprets, and reports various UVM student, faculty, staff, and curricular information.

This data supports budget, management, planning, and policy activities at the institutional level (the Board of Trustees, President, Senior Vice President and Provost, and other vice presidents/provosts). We also publish various routine reports; provide official institutional data and statistics to meet various institutional reporting requirements; conduct institutional studies and analyses; and respond to special requests for data and analyses from the broader university community and others as time and resources allow



Catamount Data provides Student Information data including student enrollments, completions, and retention/graduation rates.



#### Faculty / Staff Information

Catamount Data provides faculty and staff information including data on headcount, base pay, department, occupation and diversity trends.



### Strategic Planning

OIR can help units and departments working on their strategic plans with reliable data, information, and analyses.

CONTACT THE OFFICE OF INSTITUTIONAL RESEARCH

#### Recent News/Updates

Jan. 22: Student Flow and Average Class Size dashboards released.

Nov. 20: Faculty/Staff dashboards for 2019-2020 updated

Nov. 19: List of Base Pay for 2019-2020 updated

Sept. 27: Campus Climate Survey Dashboard released

#### Staff

Alexander Yin Executive Director

Larry Granillo Sr. Institutional Research Analyst

Meg Nyce

Institutional Research Analyst

## **Catamount Data**

- Central repository for OIR's data
- Publicly-available information includes:
  - Student enrollment (by college, race/ethnicity, etc.)
  - Student persistence
  - Degrees awarded by program
  - Faculty & staff headcounts



#### UVM OFFICE OF INSTITUTIONAL RESEARCH

#### Catamount Data



Catamount Data is the central place to find official data and analysis about the University of Vermont. It provides quick access to summary information relating to students, degrees awarded, faculty & staff, and more.

#### **Faculty and Staff Information**

Catamount Data provides faculty and staff information including data on headcount, base pay, department, occupation and diversity trends.

#### Completions and Degrees Awarded

Catamount Data also includes information about the number of degrees awarded to students each year including a program-byprogram breakdown.

#### STUDENT ENROLLMENT & SUCCESS

Catamount Data provides student-focused data including student enrollments, completions, and retention/graduation rates.

STUDENT ENROLLMENT DASHBOARD

ADMISSIONS DATA

RETENTION / GRADUATION

ENROLLMENT

DEGREES AWARDED

CAREER OUTCOMES

LEARNING OUTCOMES

FACULTY AND STAFF

RESEARCH

UNIVERSITY & DEPARTMENT PLANNING

DIVERSITY

HISTORICAL DATA

FINANCIAL REPORTS

## **Catamount Data**

- Restricted-access information includes:
  - Campus Climate Survey results
  - Student enrollment by program
  - Student flow between programs
  - Average class size by course subject
- And more!



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ADMISSIONS DATA

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**DEGREES AWARDED** 

CAREER OUTCOMES

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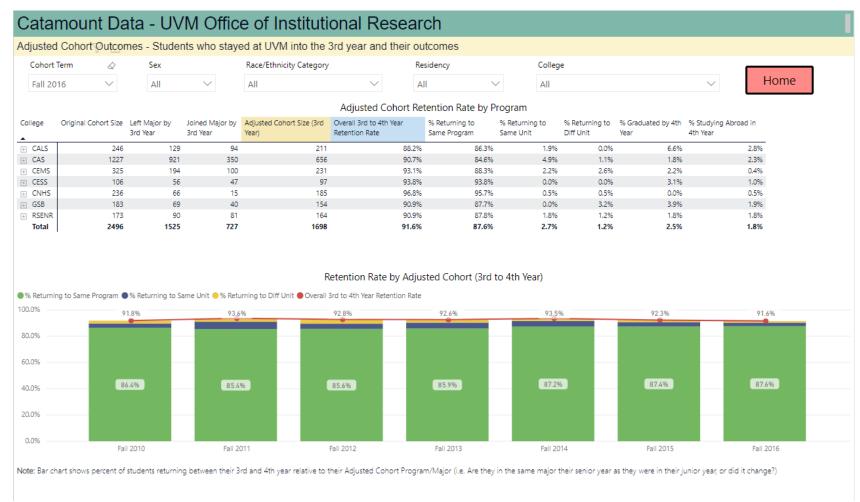
UNIVERSITY & DEPARTMENT PLANNING

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# **Adjusted Cohorts Outcomes**



Catamount Data –

Retention/Graduation –

Retention/Graduation Planning

http://go.uvm.edu/ruz8i

# **Adjusted Cohorts Notes**

- The adjusted cohort size is calculated using this formula:
   Adjusted Cohort Size = Original Cohort Size Students who leave + Students who join
- Retention and graduation rates are higher for the adjusted cohort
   (once students stay into their junior year, they will most likely stay for their senior year)
- Students who stay into their junior and senior years will take more classes within their program

# Data Hunt: Adjusted Cohorts Outcomes

Use the adjusted cohort dashboard to answer these questions:

Choose a cohort or group of cohorts within your program/department/college:

- 1. How many students are in the original cohort for your program/department/college? How many students are in the adjusted cohort?
- 2. What is the 3<sup>rd</sup> to 4<sup>th</sup> year retention rate for your program/department/college? What percentage of students returned to the same program/department/college during their senior year? What percentage graduated by their 4<sup>th</sup> year?
- 3. What is the 4 year graduation rate for the adjusted cohort for your program/department/college? 6 year graduation rate?

## **Student Curriculum Matrix**



## Student Curriculum Matrix, Breakdown

Unit of Student Major by Unit of Course Discipline

Proprietary and Confidential

## Student Unit & Major by Course Unit & Department

		⊕ CALS Courses	⊕ CAS Courses	⊕ CEMS Courses	⊕ CESS Courses	⊕ CNHS Courses	⊕ GG Courses	⊕ GSB Courses	Interdiscipl inary Courses	±LCOM Courses		Total
		Total										
⊕ CALS	Students	21,929.0	10,411.0	2,480.0	781.0	779.0	9.0	193.0	1,032.0	3,076.0	1,431.0	42,121.0
⊕ CAS S	tudents	7,806.0	91,730.0	10,389.5	3,574.0	2,520.0	33.0	968.0	3,529.0	4,206.0	3,593.0	128,348.5
⊕ CED S	tudents	558.0	3,277.0	1,042.0	655.0	708.0	23.0	273.0	103.0	566.0	94.0	7,299.0
<b>⊞ CEMS</b>	Students	890.0	8,184.5	31,294.5	305.0	548.0	18.0	613.0	626.0	751.0	219.0	43,449.0
⊕ CESS	Students	685.0	6,211.5	1,259.0	11,749.0	266.0	7.0	36.0	214.0	257.0	190.0	20,874.5
<b>⊞ CNHS</b>	Students	1,670.0	7,255.5	1,064.0	1,071.0	15,208.5	0.0	34.0	442.0	3,280.0	120.0	30,145.0
⊕ GSB S	tudents	1,334.0	5,468.0	2,335.0	754.0	191.0	12.0	14,881.0	242.0	340.0	407.0	25,964.0
<b>⊞</b> Gradu	ate Students	1,588.0	2,808.0	3,355.0	5,826.0	6,413.5	0.0	1,776.0	3,612.8	2,711.0	956.0	29,046.2
	lisciplinary Students	0.0	91.0	231.0	58.0	0.0	577.0	0.0	0.0	0.0	0.0	957.0
RSEN	R Students	2,629.0	5,420.0	1,478.0	174.0	260.0	0.0	69.0	422.0	101.0	12,255.0	22,808.0
	± 0000	6.0	63.0	20.0	3.0	0.0	0.0	0.0	5.0	0.0	116.0	213.0
	<b></b> ENSC	779.0	2,254.0	702.0	29.0	56.0	0.0	6.0	199.0	35.0	4,145.0	8,205.0
	± ENVS	919.0	1,172.0	350.0	41.0	95.0	0.0	15.0	107.0	24.0	3,217.0	5,940.0
	± FOR	184.0	294.0	79.0	6.0	32.0	0.0	9.0	20.0	21.0	1,022.0	1,667.0
	±NR	286.0	518.0	67.0	0.0	6.0	0.0	0.0	20.0	6.0	760.0	1,663.0
	± PRT	95.0	262.0	68.0	43.0	54.0	0.0	33.0	12.0	0.0	730.0	1,297.0
	± WFB	360.0	857.0	192.0	52.0	17.0	0.0	6.0	59.0	15.0	2,265.0	3,823.0
Total		39,089.0	140,856.5	54,928.0	24,947.0	26,894.0	679.0	18,843.0	10,222.8	15,288.0	19,265.0	351,012,2

## Breakdown of Student Unit Totals by Course Unit



Catamount Data – University &
Department Planning – Student Credit
Hours & Matrix Dashboards

http://go.uvm.edu/zagdy

## **Data Hunt: Student Curriculum Matrix**

Use the student curriculum matrix dashboard to answer these questions:

- 1. For course subjects/disciplines taught in your program/department, what percent of SCH were earned by students within your college?
  - a) What are the percentages if you look only at first-year/sophomores and juniors/seniors?
- 2. For students in majors in your program/department, in which college other than your own do students earn the most SCH? Which departments within those colleges earn the most SCH?

# **Instructor Interdisciplinary Matrix**



## Instructor Interdisciplinary Matrix, Breakdown

Unit of Instructor by Unit of Course Discipline

Proprietary and Confidential

#### Instructor Unit & Department by Course Unit & Department

		CALS     Courses	⊕ CAS Courses		CESS     Courses	CNHS     Courses	⊕ GG Courses		Interdiscipl inary Courses	<b>±</b> LCOM Courses	⊕ RSENR Courses	Total
		Total										
± CALS	Instructors	38,316.5	801.0	51.0	0.0	0.0	0.0	0.0	892.5	1.5	348.5	40,411.0
<b>±</b> CAS I	nstructors	686.0	138,842.5	0.0	144.0	63.0	0.0	0.0	3,584.5	76.5	446.0	143,842.4
<b>⊞</b> CEMS	Instructors	0.0	0.0	54,483.1	0.0	0.0	0.0	0.0	389.0	0.0	0.0	54,872.1
□ CESS	Instructors	0.0	388.0	0.0	24,727.6	372.0	0.0	576.0	345.2	0.0	0.0	26,408.8
	Education	0.0	307.0	0.0	12,093.6	372.0	0.0	576.0	57.0	0.0	0.0	13,405.6
	Leadership and Development S	0.0	81.0	0.0	8,680.0	0.0	0.0	0.0	288.2	0.0	0.0	9,049.2
	Social Work	0.0	0.0	0.0	3,954.0	0.0	0.0	0.0	0.0	0.0	0.0	3,954.0
<b>⊞</b> CNHS	Instructors	0.0	41.2	0.0	0.0	25,848.9	0.0	0.0	134.6	72.0	0.0	26,096.7
⊕ GG In:	structors	0.0	0.0	0.0	0.0	0.0	679.0	0.0	0.0	0.0	0.0	679.0
<b>⊞</b> GSB Ir	nstructors	0.0	0.0	0.0	0.0	0.0	0.0	18,267.0	0.0	0.0	0.0	18,267.0
Interd    Instructor	lisciplinary ors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,424.6	0.0	0.0	2,424.6
<b>±</b> LCOM	Instructors	86.5	641.4	393.9	0.0	538.1	0.0	0.0	2,036.6	15,138.0	9.0	18,843.5
<b>⊞</b> RSENF	R Instructors	0.0	142.3	0.0	75.4	72.0	0.0	0.0	415.8	0.0	18,461.5	19,167.0
Total		39,089.0	140,856.5	54,928.0	24,947.0	26,894.0	679.0	18,843.0	10,222.8	15,288.0	19,265.0	351,012.2

Catamount Data – University &
Department Planning – Student Credit
Hours & Matrix Dashboards

http://go.uvm.edu/h5ysp





# Data Hunt: Instructor Interdisciplinary Matrix

Use the instructor interdisciplinary matrix dashboard to answer these questions:

- 1. For course subjects/disciplines taught in your program/department, what percent of SCH were taught by instructors in your college?
- 2. For instructors in your program/department, in which college other than your own do they teach courses? Which departments other than your own earn the most SCH?
- 3. For course subjects/disciplines taught in your program/department, how many SCH are earned in courses taught by tenured/tenure-track instructors? How many SCH are earned in lower-level undergraduate courses (000-level & 100-level) are taught by tenured/tenure-track instructors? What about upper-level undergraduate courses?

# **Reminders & Questions**

- OIR website: <a href="https://www.uvm.edu/oir">https://www.uvm.edu/oir</a>
- Catamount Data Center: <a href="https://www.uvm.edu/oir/catamount-data">https://www.uvm.edu/oir/catamount-data</a>
- OIR Data Request Form: <a href="https://www.uvm.edu/oir/data-requests">https://www.uvm.edu/oir/data-requests</a>
- Contact us:

Larry.Granillo@uvm.edu 802-656-1168

Jimmy.Huynh@uvm.edu

802-656-1166

# Appendix

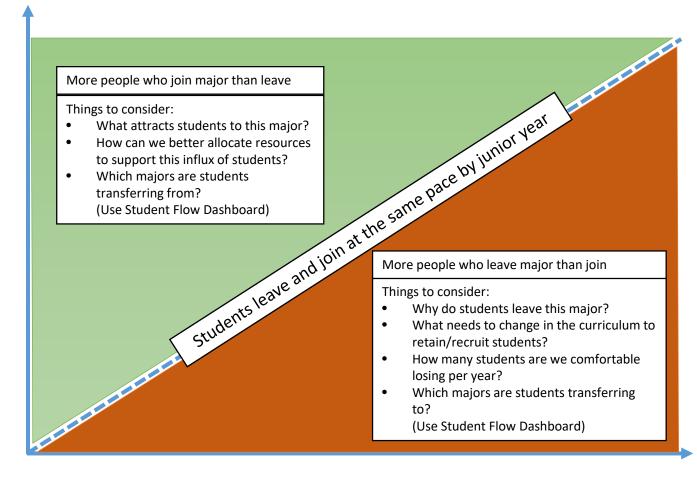


# Adjusted Cohorts: Methodology and Terminology

Variable Name	Description
Original Cohort Size	The number of students who enrolled within a unit/department/program during their first fall
Left Major by Third Year	The number of students who left that unit/department/program by their third fall. This includes students who left UVM completely.
Joined Major by Third Year	The number of students who joined and were enrolled in that unit/department/program in their third fall
Adjusted Cohort Size	The number of students who enrolled within a unit/department/program during their third fall (Adjusted Cohort Size = Original Cohort Size – Left Major + Joined Major)
Overall 3 <sup>rd</sup> to 4 <sup>th</sup> Year Retention Rate	The retention rate of students in the ADJUSTED Cohort from their Junior Year to their Senior Year to UVM.  Note, because this retention rate examines students who stay into their Junior Year, the rates in this analysis will be much higher than the traditional numbers
% Returning to Same Program	The retention rate of students in the ADJUSTED Cohort from their Junior Year to their Senior Year in the same program
% Returning to Same Unit	The retention rate of students in the ADJUSTED Cohort from their Junior Year to their Senior Year in the same unit, but not the same program
% Returning to Diff Unit	The retention rate of students in the ADJUSTED Cohort from their Junior Year to their Senior Year in a different unit
% Graduated by 4 <sup>th</sup> Year	The graduation rate of students in the ADJUSTED Cohort from their Junior Year to their Senior Year. While this rate lowers the retention rate, they are still positive outcomes for the student and program.
% Studying Abroad in 4 <sup>th</sup> Year	The study abroad rate of students in the ADJUSTED Cohort from their Junior Year to their Senior Year. While this rate lowers the retention rate, they are still positive outcomes for the student and program.
Overall 4-Year / 6-Year Graduation Rate	The graduation rates of students in the ADJUSTED Cohort

# **Adjusted Cohorts: Interpreting the Data**

Number of students who join major by junior year



Number of students who leave major by junior year

# **Adjusted Cohorts: Interpreting the Data**

A program's 3<sup>rd</sup> to 4<sup>th</sup> year retention rate is broken out into three parts:

Overall 3<sup>rd</sup> to 4<sup>th</sup> year retention rate

Students who are retained at UVM but leave the college

Students who are retained at UVM and stay at the same college, but leave the program

Students who are retained at UVM and stay at the same program

## Things to consider:

- What programs do these students transfer to in their fourth year? (Student Flow)
- Why are these students transferring between programs/colleges?
- How can we do better with our curriculum/advising/co-curricular engagement to retain students in our programs from their third to fourth year?

## Adjusted Cohort Dashboards

Question 1: How many students are in the original cohort for your program/department/college? How many students are in the adjusted cohort?

Program / Department / College	Cohort Term	Original Cohort Size	Adjusted Cohort Size

Question 2: What is the 3<sup>rd</sup> to 4<sup>th</sup> year retention rate for your program/department/college? What percentage of students returned to the same program/department/college during their senior year? What percentage graduated by their 4<sup>th</sup> year?

Program / Department / College	Cohort Term	3 <sup>rd</sup> to 4 <sup>th</sup> year retention rate	% Returning to Same Program	% Returning to Same Unit	% Returning to Different Unit	% Graduated by 4 <sup>th</sup> year

Question 3: What is the 4 year graduation rate for the adjusted cohort for your program/department/college? 6 year graduation rate?

Program / Department / College	Cohort Term	4-yr Graduation Rate	6-yr Graduation Rate

## Student Curriculum Matrix Dashboard

Question 1: For course subjects/disciplines taught in your program/department, what percent of SCH were earned by students within your college?

Course Subject/Discipline	Year	Total SCH earned	Percent Earned Within College	Percent Earned Out of College

Question 1a: What are the percentages if you look only at first-year/sophomores and juniors/seniors?

Course Subject/Discipline	Year	Total SCH earned by First-Years & Soph.	Percent Earned Within College by First-Years & Soph.	Total SCH earned by Juniors & Seniors	Percent Earned Within College by Juniors & Seniors

Question 2: For students in majors in your program/department, in which college other than your own do students earn the most SCH? Which departments within those colleges earn the most SCH?

Student Major/Program/Department	Year	Course Colleges Earning SCH	SCH Totals in Other Colleges	Top Departments in Other Colleges

## Instructor Interdisciplinary Matrix Dashboard

Question 1: For course subjects/disciplines taught in your program/department, what percent of SCH were taught by instructors in your college?

Course Subject/Discipline	Year	Total SCH earned	Percent Earned Within College	Percent Earned Out of College

Question 2: For instructors in your program/department, in which college other than your own do they teach courses? Which departments other than your own earn the most SCH?

Instructor Program/Department	Year	Course Colleges	SCH Totals in Other	Top Departments in Other
		Earning SCH	Colleges	Colleges

Question 3: For course subjects/disciplines taught in your program/department, how many SCH are earned in courses taught by tenured/tenure-track instructors? How many SCH are earned in lower-level undergraduate courses (000-level & 100-level) are taught by tenured/tenure-track instructors? What about upper-level undergraduate courses?

Course Subject/Discipline	Year	Course Level (All, Lower Level, Upper Level, etc.)	Instructor Track	Total SCH