

# URGE

## Unlearning Racism in Geoscience

### URGE Demographic Data for the Geology Department, WWU

This white paper summarizes demographic data for the Western Washington University Geology Department as compiled by the department's URGE pod from public and internal sources. It also lists stated goals for representation, and/or proposals to collect and report demographic data.

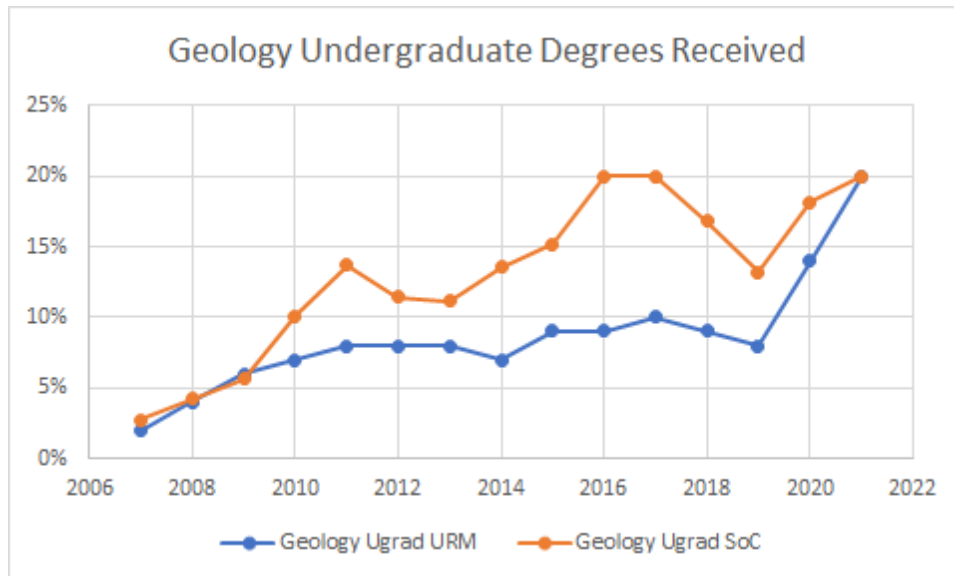
- **The link(s) to demographic data at our organization are here:**
  - [Link](#) – Factbook, WWU's web-based clearing house for demographic data of current and former students (2006-2021). Click on GR: Science & Engineering>Geology.
  - [Link](#) – more granular breakdown of Geology undergraduate demographics, 2010-2018
  - [Link](#) – more granular breakdown of Geology graduate student demographics, 2010-2018
  - [Summary table/graphs](#) of counts/percentages of SoC vs. white students for WWU Geology, 2010-2018
  - WWU also tracks demographics for all faculty and staff; however, WWU maintains strict confidentiality on these data only releases these data in accordance with applicable laws, executive orders and regulations..
- **Overall summary:**
  - *Undergraduates:* since 2006, there have been 2,440 Geology majors; of those, ~43% have identified as female, 28% are first-generation college students, 12% identify as [Students of Color \(Black, Indigenous, Person of Color – BIPOC\)](#), and [9% identify as URM \(Underrepresented Minority\)](#).

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WWU Total				# Stud	Has earned an Associates Deg.	Has earned credit at a Comm College	Gender: Female	First Gen	Pell - Eligible	Resident	Stud of Color	URM	
				#####	25%	42%	56%	32%	23%	91%	16%	9%	
GR	GR: Business & Economics	-	-	MAJOR	1,234	23%	30%	40%	21%	0%	90%	14%	7%
	GR: Fine & Performing Arts	-	-	MAJOR	134	10%	13%	48%	11%	0%	75%	12%	8%
	GR: Humanities & Social Sc.	-	-	MAJOR	2,977	17%	23%	70%	18%	0%	76%	12%	7%
	GR: Huxley Coll Env	-	-	MAJOR	1,209	8%	11%	67%	7%	0%	64%	11%	8%
	GR: Interdisciplinary	-	-	MAJOR	1	0%	0%	0%	0%	0%	100%	0%	0%
	GR: None	-	-	MAJOR	3	0%	0%	0%	33%	0%	100%	0%	0%
	GR: Science & Engineering	-	-	MAJOR	1,727	10%	19%	42%	13%	0%	67%	10%	5%
	GR: Woodring Coll Ed	-	-	MAJOR	2,337	22%	24%	66%	22%	0%	96%	14%	10%
UG	UG: Business & Economics	-	-	MAJOR	23,023	29%	45%	40%	35%	22%	93%	17%	9%
	UG: Fairhaven	-	-	MAJOR	3,586	19%	45%	68%	25%	38%	85%	17%	12%
	UG: Fine & Performing Arts	-	-	MAJOR	12,702	21%	38%	67%	28%	25%	89%	15%	9%
	UG: Humanities & Social Sc.	-	-	MAJOR	61,155	28%	43%	64%	35%	25%	93%	16%	10%
	UG: Huxley Coll Env	-	-	MAJOR	7,804	22%	41%	57%	26%	22%	85%	13%	8%
	UG: Interdisciplinary	-	-	MAJOR	657	18%	35%	57%	31%	30%	87%	30%	21%
	UG: Science & Engineering	Biology	-	MAJOR	6,034	23%	46%	64%	30%	24%	88%	18%	9%
		Chemistry	-	MAJOR	2,594	16%	41%	40%	28%	23%	93%	17%	9%
		Computer Science	-	MAJOR	3,984	23%	47%	15%	28%	24%	95%	14%	7%
		Engineering and Design	-	MAJOR	6,098	16%	37%	12%	28%	23%	93%	17%	9%
		Geology	-	MAJOR	2,440	20%	39%	43%	28%	23%	90%	12%	8%
		Mathematics	-	MAJOR	3,320	25%	44%	41%	30%	25%	92%	19%	9%
		Physics and Astronomy	-	MAJOR	1,390	14%	43%	21%	31%	27%	95%	13%	7%
		Science Education	-	MAJOR	560	36%	49%	76%	34%	27%	98%	16%	10%
	UG: Woodring Coll Ed	-	-	MAJOR	8,018	34%	50%	90%	42%	30%	94%	17%	10%

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- The WWU Geology program has seen a relatively steady increase in undergrad majors who identify as SoC, rising from ~3% in 2006 to ~15-20% in the last few years. Students identifying as URM largely plateaued for the last decade, except for the last two years:



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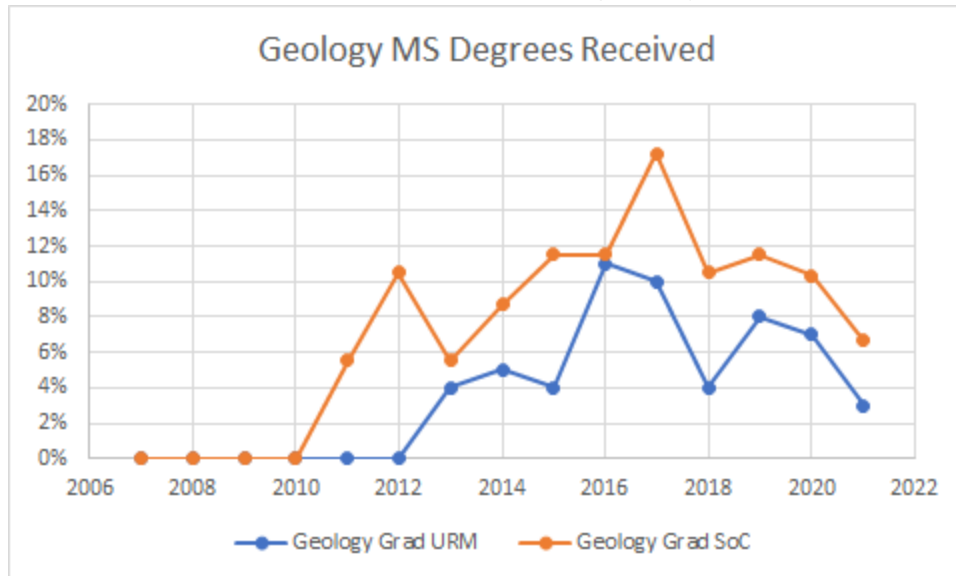
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- *Graduates*: since 2006, there have been 375 Geology MS students, 48% of whom identify as female, 4% as first-generation college students, 6% identify as SoC, and 4% identify as URM.

		# Stud	Has earned an Associates Deg.	Has earned credit at a Comm College	Gender: Female	Fist Gen	Pell - Eligible	Resident	Stud of Color	URM
<b>WWU Total</b>		#####	25%	42%	56%	32%	23%	91%	16%	9%
<b>GR</b>	GR: Business & Economics	MAJOR 1,234	23%	30%	40%	21%	0%	90%	14%	7%
	GR: Fine & Performing Arts	MAJOR 134	10%	13%	48%	11%	0%	75%	12%	8%
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	GR: Interdisciplinary	MAJOR 1	0%	0%	0%	0%	0%	100%	0%	0%
	GR: None	MAJOR 3	0%	0%	0%	33%	0%	100%	0%	0%
	<b>GR: Science &amp; Engineering</b>									
	Biology	MAJOR 365	5%	12%	61%	8%	0%	58%	7%	4%
	Chemistry	MAJOR 258	16%	36%	43%	29%	0%	89%	15%	7%
	Computer Science	MAJOR 330	15%	27%	19%	17%	0%	84%	15%	8%
	Geology	MAJOR 375	3%	4%	48%	4%	0%	33%	6%	4%
	Mathematics	MAJOR 338	12%	25%	30%	13%	0%	78%	11%	5%
	Science Education	MAJOR 61	16%	7%	67%	0%	0%	95%	3%	0%
	GR: Woodring Coll Ed	MAJOR 2,337	22%	24%	66%	22%	0%	96%	14%	10%
<b>UG</b>	UG: Business & Economics	MAJOR 23,023	29%	45%	40%	35%	22%	93%	17%	9%
	UG: Fairhaven	MAJOR 3,586	19%	45%	68%	25%	38%	85%	17%	12%
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- Although there has been an overall increase in WWU Geology MS students identifying as SoC, it went from essentially zero before 2011 to a plateau of roughly 8-12% over the past decade. Geology MS students identifying as URM have mimicked this trend but at a lower level (3-10%):

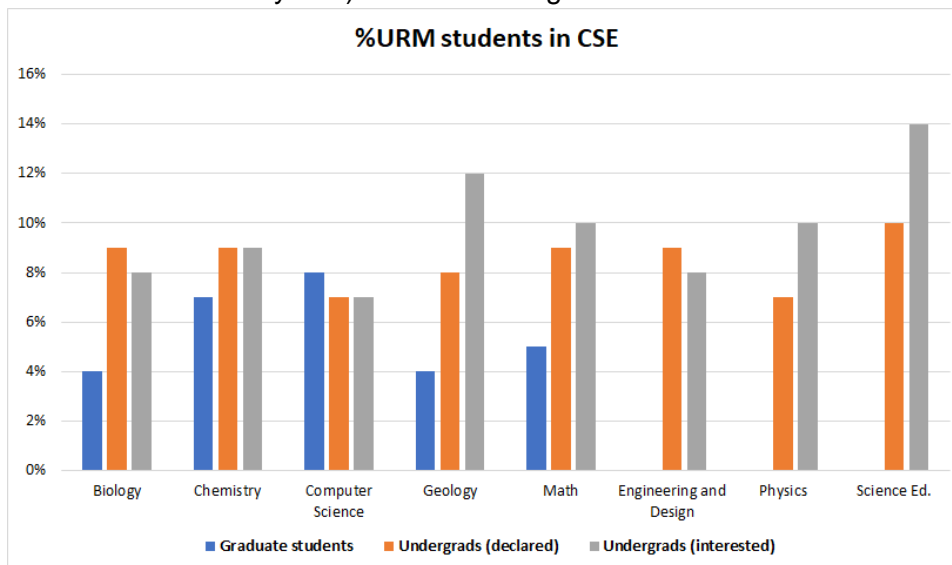


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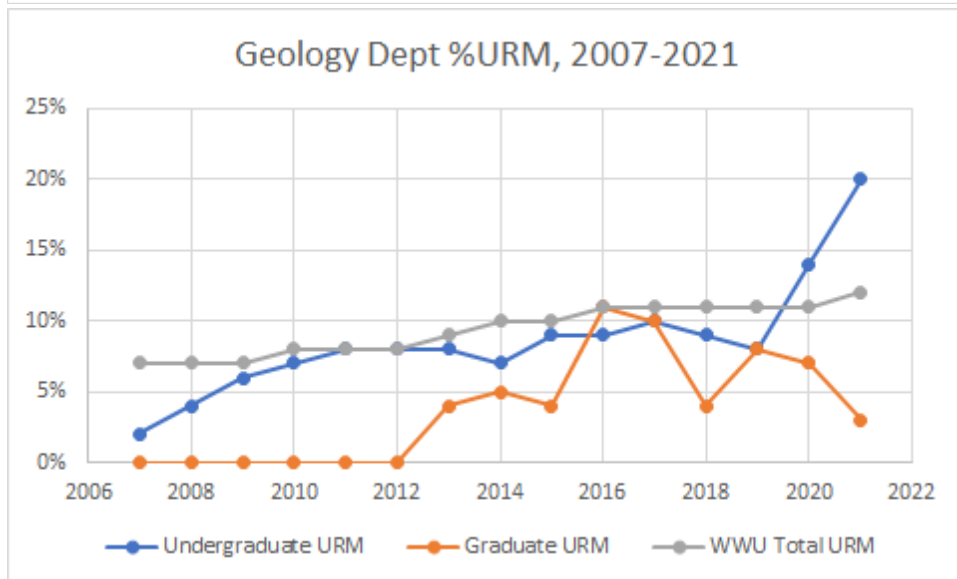
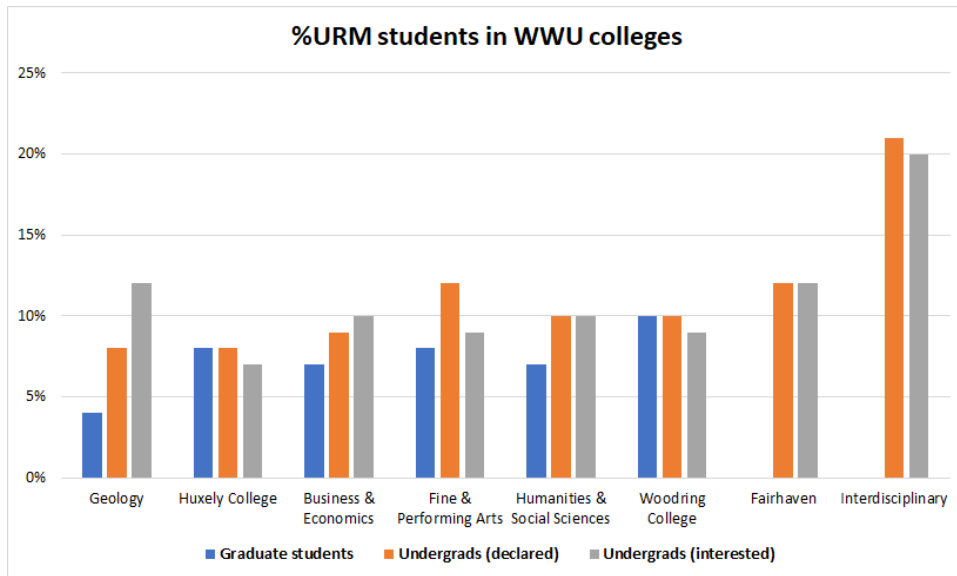
## Unlearning Racism in Geoscience

- **How does WWU Geology compare to other departments in CSE? To other colleges at WWU? To WWU as a whole?**
  - WWU Geology ranks 5/6 for % URM graduate and 7/8 for % URM undergraduate students within CSE departments based on data from 2006-2021
  - WWU Geology ranks 6/6 for % URM graduate and 8/8 for % URM undergraduate students when compared to the other colleges at WWU based on data from 2006-2021 (excludes “Interdisciplinary” and “None” categories because there are only 4 total students)
  - For the 2020-2021 academic year, WWU has 12% URM while the geology department has 20% URM undergraduates (this is an anomaly compared to other years) and 3% URM graduate students



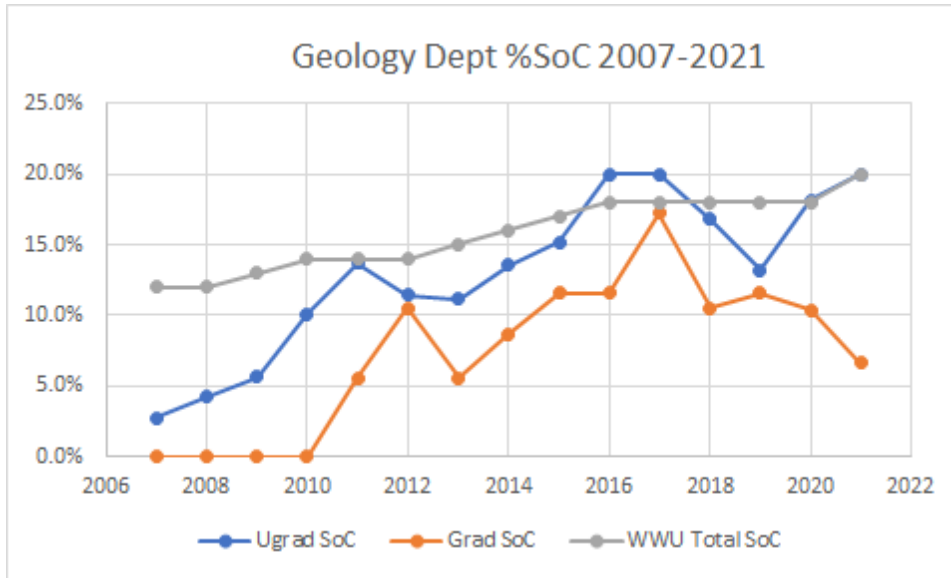
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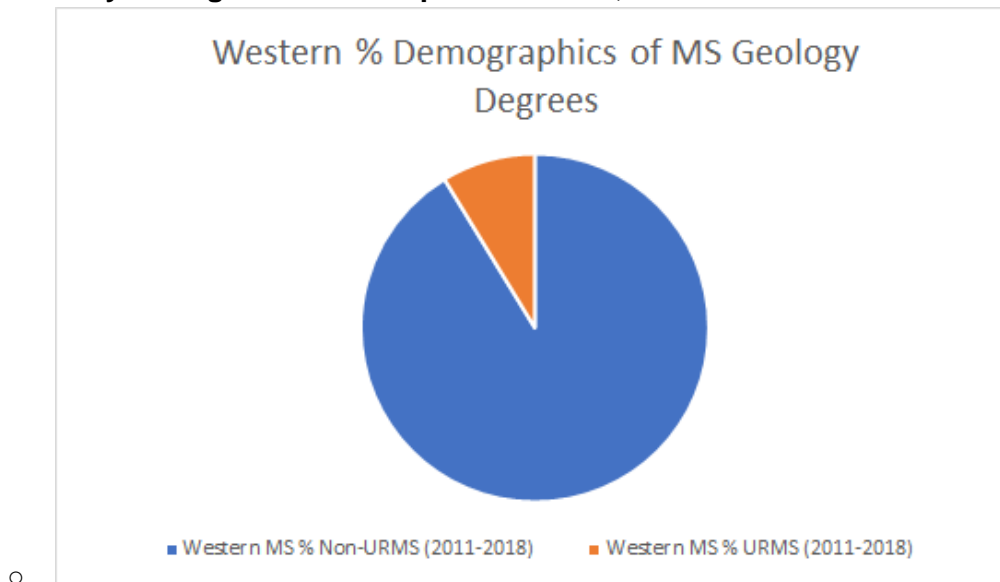


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## Unlearning Racism in Geoscience



- How does your organization compare to others, or to the field as a whole?



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Western % Demographics of BS Geology Degrees



■ Western BS % Non-URMS (2011-2018) ■ Western BS % URMS (2011-2018)

National % Demographics in Geology Degrees



■ National % Non-URMS (2017) ■ National % URMS (2017)

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- Compared to [national % of geology majors](#) Western ranks lower in percentage of URMS (underrepresented minority student). Nationally 30% of geology majors are URMS, at the undergraduate level Western has about 15% URMS (2011-2018) and at the graduate level only 9% of students are URMS.



## Unlearning Racism in Geoscience

- **Efforts for increasing representation:**
  - We are developing several new initiatives to attract and retain a diverse group of undergraduate and graduate students, as well as faculty:
    - We have appointed Department-level Community Ambassadors (one student, one faculty) to nurture a supportive, inclusive culture in the department. The [Community Ambassadors](#) also coordinate efforts with other department ambassadors within the College of Science.
    - Dedicating several department seminars each quarter to explicitly address issues of race, equity, and inclusivity in the geology department and in the geosciences (e.g., Geology Lunch Talks, Visiting Speaker Series, InclusiviTea meetings)
    - Revising the departmental addendum to the COPEP (College Operating Procedures and Evaluation Plan, the primary document guiding evaluations for the promotion, tenure, and PTR of faculty) to specifically include evaluation of Equity, Inclusion, and Diversity efforts in the context of teaching, research and/or service.
    - Changes in our majors curriculum, including developing a more inclusive alternative capstone class (“Lab Camp”) to our traditional capstone (Advanced Field Mapping) for our BS majors.
    - The CSE Community Ambassadors (including Geology) established an endowed scholarship for Black STEM students in honor of Black History Month.
    - Other proposed efforts: *Short term ideas* 1. to have student representation in faculty meetings; 2. sharing of faculty EID work to the student body; 3. sharing by students of their STEM paths and experiences; 4. incorporating more EID discussion into our classes; 5. creating a physical space to share opportunities and experiences. *Longer term ideas*: revising dept/CSE/WWU policies for handling complaints, policies for working with communities of color, admissions and hiring policies, and lab and field codes of conduct.
    - The WWU Geology Department encourages and promotes several student-lead organizations (Diversity in Geosciences, WWU Chapter of the AEG)
  - Are there measurable goals stated at your organization for achieving representation?
    - To have at least one departmental seminar each quarter devoted to EID issues in the Geosciences
  - Suggested additional goals for your organization:





## Unlearning Racism in Geoscience

- Adding a statement about diversity and inclusion specifically about Geosciences to Western's geology homepage
  - Include links/contact info about student-lead geology groups/clubs (e.g., DIG, AEG chapter).
  - Close the gap between URM undergraduates interested in and declared for the geology major
  - Adding bio's for some of our past faculty and students associated with the department to the Dept. web page; there have been a number of people who challenged gender and racial barriers during their careers and we'd like to highlight their stories.
- **Policy or proposed policy for collecting demographic data at your organization:**
    - WWU tracks demographic information for students as well as faculty and staff. Student demographic information is generated from the application for admission. Certain elements (gender identity and race) can be updated by students after arriving at WWU through Web4U (WWU's web-based student/faculty database). All student demographic information is ultimately self-reported including things like first generation college student.
    - Demographic information for faculty and staff is generated when they are hired at WWU. As for students, faculty and staff can change or update their information via the Web4U portal. However, the university provides its employees a higher level of confidentiality about their demographic information than for students. Specifically, WWU promises employees that their data will be used only in accordance with applicable laws, executive orders and regulations. They thus do not release employee demographic information at the individual-level unless necessary under these provisions.
  - **What did you learn about other organizations (or in general) while investigating demographic data?**
    - <https://diversity.ideo.columbia.edu/seminardiversity> - Increase diversity in seminars
    - <https://www.nature.com/articles/d41586-019-03784-x> - No all-male panels
    - <http://www.ohrc.on.ca/en/policy-and-guidelines-racism-and-racial-discrimination/part-3-%E2%80%93-guidelines-implementation-monitoring-and-combating-racism-and-racial-discrimination> - more information on collection of demographic data in Canada.
    - <https://datausa.io/profile/cip/geological-earth-sciences#demographics> – for data of other US geoscience department demographic data.