



URGE Demographic Data for the Dept of Earth and Atmospheric Sciences at UNL

This is what was found by the Department of Earth and Atmospheric Sciences at the University of Nebraska–Lincoln on demographic data (public and internal facing) as well as stated goals for representation, and/or proposals to collect and report demographic data.

The link(s) to demographic data at our organization are here:

- <https://iea.unl.edu/> - UNL Institutional Effectiveness and Analytics. This website allows you to pull demographics and other statistics on UNL students, staff and faculty.
- UNL only reports binary gender identities; however, there is a procedure to change your gender within the system (<https://registrar.unl.edu/academic-standards/policies/change-gender/>).
- We compiled a list of invited speakers to our weekly Stout Lecture Series.

How does your organization compare to others, or to the field as a whole with regards to ethnic/racial diversity?

- **Broader Geoscience Community:** In 2019, AGI reported that underrepresented minorities accounted for:
 - 15.7% of geoscience bachelor's degrees
 - 10.0% of geoscience master's degrees
 - 6.7% of geoscience doctorates
 - Data source: <https://www.americangeosciences.org/geoscience-currents/diversity-geosciences>
- **EAS Degrees:** The Department of Earth and Atmospheric Sciences at UNL offers undergraduate degrees in geology and meteorology/climatology and graduate degrees in the geosciences (includes both geology and meteorology). Since 2010, the percentage of undergraduate degrees that our department has conferred to minorities is on the low side in comparison with these community wide stats (see below). However, the percentage of minority graduate degrees is above average. In completing these calculations, we used the University of Nebraska's definition of minority which does not include nonresident aliens as minorities. As quite a few of our students who are nonresident aliens would identify as minorities, these numbers are likely on the low side.
 - GEOL BS degrees (2010-present): 7%
 - GEOL BA degrees (2010-present): 6%
 - MET/CLIM BS degrees (2010-present): 2%
 - GEOS MS degrees (2010-present): 11%
 - GEOS PhD degrees (2010-present): 13%

- **EAS Faculty Diversity:** Our current faculty (tenure and non-tenure track) shows low racial and ethnic diversity as only 5% identify as minority.
- **Nebraska Diversity:** As the University of Nebraska is located in a region that is predominantly white, we also looked at the statewide demographics to help put our numbers in context. The chart below shows Nebraska demographics from the 2019 Census (<https://www.census.gov/quickfacts/fact/table/NE/PST045219>).

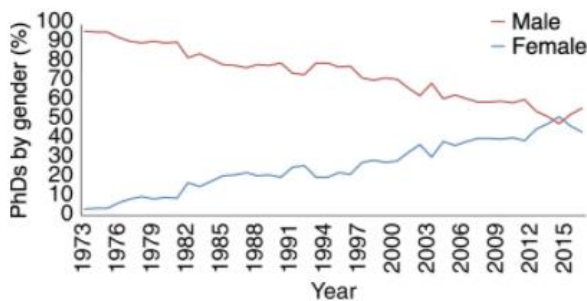
Race and Hispanic Origin	
White alone, percent	88.1%
Black or African American alone, percent (a)	5.2%
American Indian and Alaska Native alone, percent (a)	1.5%
Asian alone, percent (a)	2.7%
Native Hawaiian and Other Pacific Islander alone, percent (a)	0.1%
Two or More Races, percent	2.3%
Hispanic or Latino, percent (b)	11.4%
White alone, not Hispanic or Latino, percent	78.2%

How does your organization compare to others, or to the field as a whole with regards to GENDER diversity?

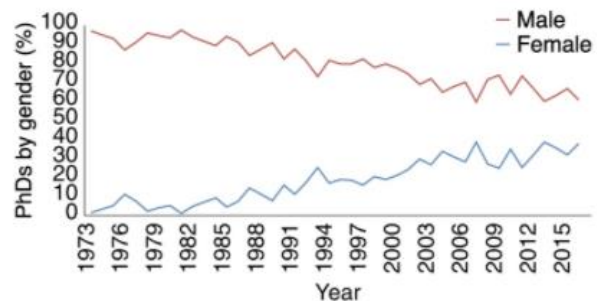
- **Broader picture:** “From 2010-2017, data published by the American Geosciences Institute (AGI; Gonzales, 2019) indicates that enrollment and graduation rates of women with B.S., M.S., and Ph.D. degrees in geological sciences have remained steady between roughly 35-45% as compared to roughly 20-25% in 1985.” (excerpt from <https://eartharxiv.org/repository/view/2060/>). Data from Bernard & Cooperdock (2018) show that the gender gap is wider in Atmospheric Sciences compared with Earth Sciences (see image below)

Per cent of PhDs earned by gender over time

a Earth sciences

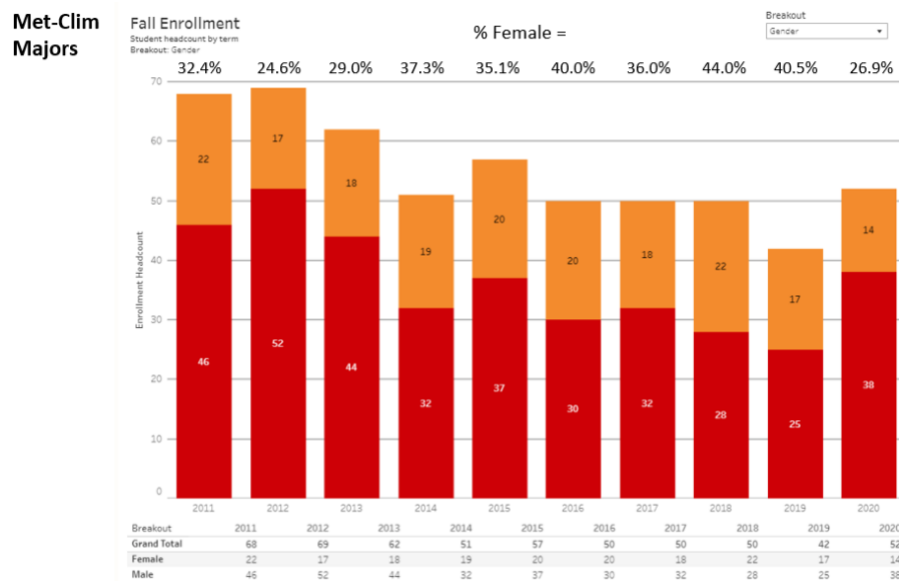
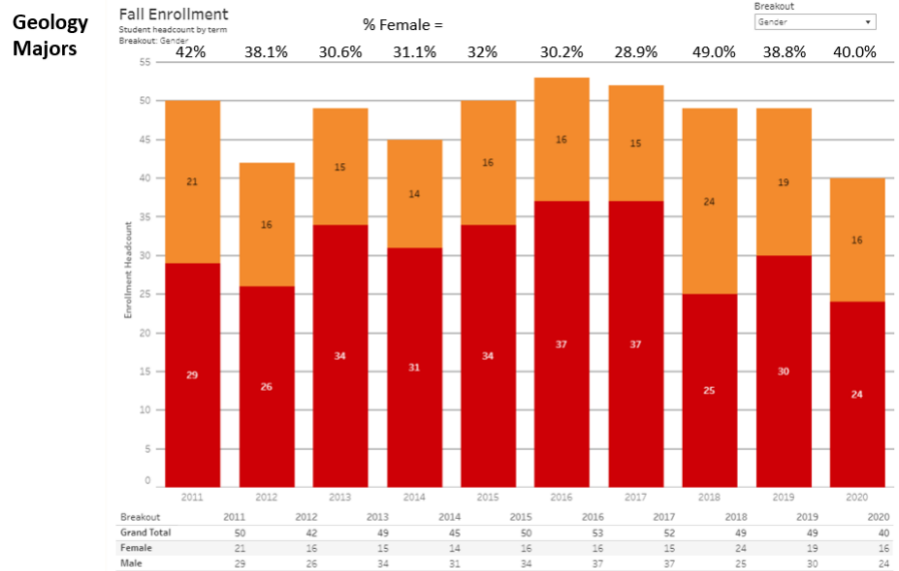


b Atmospheric sciences



- **EAS Degrees:** Since 2010, the percentage of degrees that our department has conferred to women is on the low side in comparison with these community wide stats (see below). More females do opt for a BA degree; however, this is a less rigorous degree program than the BS track and the number of students who opt for that track is relatively small.

- GEOL BS degrees (2010-present): 33% female (out of 91)
 - GEOL BA degrees (2010-present): 56% female (out of 18)
 - MET/CLIM BS degrees (2010-present): 34% female (out of 87)
 - GEOS MS degrees (2010-present): 35% female (out of 99)
 - GEOS PhD degrees (2010-present): 31% female (out of 32)
- **EAS Majors:** The percentage of undergraduate majors within our department that identify as female also shows that females are underrepresented. The plots below show the number of geology and meteorology/climatology majors that identify as female (orange) and male (red). The numbers above the bar graphs show the % females. These plots are based on Fall enrollments from 2011 to 2020.



- **EAS Faculty:** Currently, 9 out of our 21 faculty (both tenure and non-tenure track) identify as female (43%). While this number is promising, there is a disparity when we compare the geology faculty (62% female; 8 females & 5 males) with the meteorology/climatology faculty (11% female; 1 female & 8 males).
- **Invited Guest Speakers:** From the data available, we estimate that 34% of the speakers invited to present at our weekly seminar series have been female. However, concerted efforts have been made over the last few years to increase our speaker diversity. As part of this effort we invite speakers from the AWG Distinguished Lecturer Program (<https://awg.org/distinguishedlecturer>).

Public goals on demographics or increasing representation:

- The Strategic Plan for the College of Arts and Sciences at UNL (<https://cas.unl.edu/strategic-plan-details-and-drafts>) lists six goals, one of which is “Leading in Inclusive Excellence and Diversity”. The strategic plan is organized by years 1 (2021-2022), 2-3 (2022-2024) and 4-5 (2024-2026) and for each unit of time there are measurable objectives to support the larger goals. For example, one of the objectives for 2021-2022 is to “Conduct annual diversity climate surveys throughout CAS to assess issues of race, gender, sexuality, and gender identity”. The expectation is that the climate surveys will “inform unit-level diversity action plans to support cultures of inclusive excellence”.

Policy or proposed policy for collecting demographic data at your organization:

- Demographics for all students and faculty are collected and information is available at <https://iea.unl.edu/>

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.