COURSE
COlorado Undergraduate Retention in Science and Education
• ACCESS Success

• Amazing programs (faculty) at CCs

• Not connecting with Space Grant at 4-yr institutions

• Inclusive COSGC projects at 4-yrs
2 year pilot program

- Only CU
- Small scholarship (up to 6 semesters)
- Hands-on Project
- 3 Students (1 student at a time)
- Focused on hands-on aspect with regular check-ins
- Research into CO transfer processes/opportunities
Innovative Pilot Opportunity

• Main goals:
  ★ Retaining students as they transfer
  ★ Helping 1st/2nd year student retention overall by
    ★ Creating community
    ★ Providing hands-on projects
      • expanding offerings @ COSGC institutions.
COURSE
COlorado Undergraduate Retention in Science and Engineering
-benefit from COSGC's success in students hands-on projects-

• 2-yr to 4-yr Space Grant pipeline
  ★ Summer Bridge
  ★ 1-yr scholarship
  ★ Hands-on project placement
  ★ Engagement Grants
• Supplemental Grants
• Expand programs at all COSGC institutions
  (1st & 2nd year students)
• Robotics/Balloon Payload Workshops

APPROACH
COURSE

- Student project manager
  - Transfer student
- Two-sided mentoring
- Change of Summer Bridge Plans
- Buy-in of all 4-yr institutions to engage transfer students
Gerardo Pulido

Community College of Aurora

CU Boulder Aerospace Engineering
Welcome to the homepage of the Colorado Space Grant Transfer Student program (part of the COlorado Undergraduate Retention in Science and Engineering [COURSE] effort).

This website is designed specifically to help Space Grant students transferring from community colleges to connect with Space Grant programs at the four year colleges/universities where they will be completing a bachelors degree. Here you can learn about Space Grant programs at all 16 affiliate institutions of higher education; apply for a scholarship and inclusion in a hands-on project; find contacts at all institutions, and contact information for the program leadership.

For faculty members there is information about the benefits of supporting a student.

We urge you to explore the site and contact us if you have any questions. Best of luck in your educational endeavors. We hope to see you in a Space Grant project at a 4-year institution soon!

If you have any questions about the program or how to participate, contact Bernadette Garcia at bgarcia@colorado.edu or 303-492-3141 or Gerardo Pulido at gerardo.pulido@colorado.edu or 303-492-3704.
Below are logos for all Colorado Space Grant affiliate schools. Each logo will take you to the information page of the corresponding school. From there, you can click on a link that will take you to the transfer website of the school.

Take the time to check-out several schools. You may find something you really love at an unexpected campus!
Goal: 11 Students Awarded

- 20 Applications Started/Submitted
  - 1 student not US citizen*

- 13 Completed & Eligible
  - 2 students transferred out of state - declined award
  - 2 students deferred to Year 2

- 9 students awarded as Year 1 transfers
  - 8 fall & 1 spring

1 - Pikes Peak Community College
5 - Community College of Aurora
2 - Trinidad State Junior College
1 - Community College of Denver

2 - Colorado School of Mines
1 - University of CO, Colo.Springs
2 - CO Mesa University
4 - University of CO, Boulder
Expanded programs around the state:

- CCD - RocketSat mission
- PPCC - Additional DemoSat payload
- CSU - 1st Yr Robotics Projects
- CU - DemoSat payload (SHPE/MAES & SWE)
- UCCS - Engage student in aerospace faculty research project
- FLC - Expand autonomous robot program
- CSM - NASA Robotic Mining Competition student team
- TSJC - New course
Expectation

CO Guaranteed Transfer = Credits transfer easy and complete

Reality

Only enrollment at institution is guaranteed.
LESSONS LEARNED

Expectation
Transfer cohort demographics close or over percentage goals.

Reality
STEM is STEM, even in community colleges.
Expectation
Two-sided mentoring would help avoid students “falling through the cracks”.

Reality
Exactly as we thought.
LESSONS LEARNED

Expectation
Hands-on projects most important for transfer student retention.

Reality
- Travel Distances
- Limited Institutional Support
- Shock of academic performance
- Family obligations
- Isolation
- 1st generation students
- Veterans

3 of 9 students in Yr 1 cohort in hands-on project
Expectation
Summer bridge experience would be helpful.

Reality
Extremely beneficial:
VIP tour of campus
Face-to-face meeting with students & faculty
Don’t know what they don’t know - difficult to formulate questions.
Get to know project manager
Discuss pitfalls and lessons learned with peers.

LESSONS LEARNED
Expectation
During Summer Bridge most important information is about department and degree program.

Reality
TRIO PROGRAMS!!
Connect with students on campus.
Multicultural Centers
Tutoring Centers
Veteran Offices
Expectation
There would be stuff we didn’t know we didn’t know.

Reality
Even with all the questions we asked, we didn’t know the half of it.

LESSONS LEARNED
• Help with retention - especially with students transferring from 2 to 4-yr institutions.

• Lessons Learned = building blocks for adding new CCs

• 4-yr institutions better understand transfer student experiences

• May eventually inform transfer credit issues
  • ADs willing to tweak courses to be more aligned.

• Helped solidify the change throughout COSGC when it comes to inclusive programming at ALL institutions.

OVERALL BENEFITS