COLLEGE OF THE SCIENCES
CONNECTIONS
June 2026 Edition

Do Intro Courses Build Scientists?

How introductory science courses shape future educators and their science identity.

About Connections

WELCOME TO THE FIRST ISSUE of the College of the Sciences newsletter, *Connections*! Each month, we will share highlights on the achivements, research, and news from students, faculty, and staff from across the College of the Sciences. We are glad you are here.

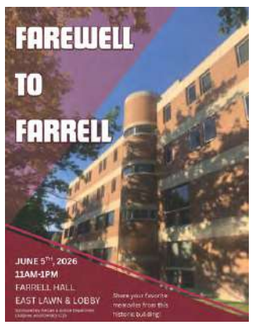
Joseph Gabriel Davey
(he/she/they)
Administrative Assistant
COTS Deans Operating

Saying Good-Bye

Central Washington University, "Farrell Hall" (1975). Building Photographs. 97.

Farrell Hall, named after CWU alumna and physician Corrine Farrell, was built in 1975 and was originally intended as an extension of the library complex. Farrell is currently home to Political Science, Law and Justice, and the Northwest Earth and Space Sciences program. The historic building is slated to come down in Summer 2026, with academic departments moving out in June 2026.

The Department of Law and Justice is hosting **Farewell to Farrell** on June 5 from 11 AM to 1 PM. Join Law and Justice in saying goodbye to Farrell Hall,. Share memories and stories of your time in the hall. Games and light refreshments will be provided.



Celebrating Students of the Sciences

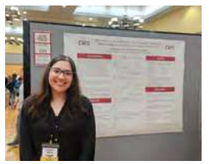
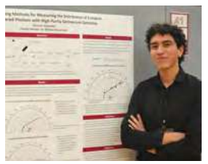
The month of May offered us two rare opportunities to gather and celebrate the people that define the College of the Sciences.

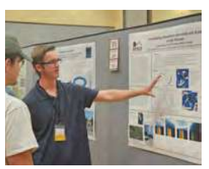
24 **CELEBRATION OF THE SCIENCES**
honorees from the Sciences recognized for research, leadership, and stewardship.

Distinguished Student Awards	
Alyssa Castilla	Anthropology & Museum Studies
Alora Van Auken	Biological Sciences
Celeste (Cece) LaPlace	Chemistry
Jaewon Heo	Computer Science
Bronwen Hardee	Cultural and Environmental Resource Management
Mila Eslinger	Environmental Studies
Benjamin Kosalko	Geography
Jessica Maynard	Geological Sciences
Epiphany LaPlante	Interdisciplinary Studies - Social Sciences
Shinhae Hwang	Law and Justice
Elliot Carlsson	Mathematics
Mason Skeath	Physics
Ryan Van Der Put	Political Science
Sophia Hickey	Primate Behavior and Ecology
Quaid Hunt	Psychology
Acacia Brown	Science and Mathematics Education
Emily N. Lugo Rosales	Sociology
Javi Garcia Sanchez	Women, Gender, and Sexuality Studies
Achievement Awards	
Mike Bosko	Distinguished Alumnus
Jackie Cooke and Guy Moura	Distinguished Alumni
Lisa Stowe	Force of Nature
Brenda Bland	Excellence in Service to the College
Jean Marie Linhart	Excellence in Teaching and Student Success

130+ **SOURCE 2026**
student-led presentations from across the Sciences at SOURCE.

60+ faculty members offered students support and mentorship.


And now, as we enter June, we congratulate the

600+ **GRADUATION / COMMENCEMENT**
students graduating Winter and June 2026.

We are so proud of you. You will always be a part of this community!

Graduating this year? Stay in touch with the College of the Sciences on Instagram, LinkedIn, and through the Connections newsletter.
@cwusciences

Do intro courses build scientists?

Q&A with Dr. Anne Egger and Dr. Leighanna Hinojosa

Many future educators will leave college with only one or two introductory science classes. Those one or two intro courses can determine how they leave feeling about their scientific ability, directly shaping how they teach and inspire the next generation of students.

"That person who goes on to teach is going to have an impact on hundreds, if not thousands of children in their lifetime," Anne Egger, a professor in the CWU Department of Geological Sciences and Department of Science and Mathematics Education at CWU, said. "It's absolutely critical."

Dr. Anne Egger
Professor
Geological Science
Science & Mathematics Education

Oftentimes, those same intro courses are weed-out courses, designed to either test students' resolve or reduce enrollment in highly competitive majors. Leighanna Hinojosa, Director of Evaluation for the GEAR UP the METRO grant at the University of Oklahoma and a former Science Education Specialist in the Department of Science and Mathematics Education at CWU, asked: "Why are students feeling like they don't belong in science, even when they're equally capable?"

Dr. Leighanna Hinojosa
Science Education Specialist, CWU
Director of Evaluation, K20 Center OU

"We don't want these spaces to be exclusionary and push students out. We want more people to enter with these diverse perspectives and to participate and collaborate."

Hinojosa and Egger conducted research on the impact of changing STEM teaching practices and materials through the TIDeS Project, or Teaching with Investigation and Design in Science. Their most recent publication, in April 2026, Building students' science identity in introductory undergraduate science courses, examines their data from the TIDeS Project. Their findings suggest that intro courses can build scientists, especially when those courses provide opportunities for students to build science skills, participate in science as a social and collaborative process, and see themselves represented among scientists from all backgrounds.

Q: What did the study measure?

A: "We developed pre- and post-class surveys measuring students' confidence in their ability to do certain science tasks, not memorizing facts," Egger said. "We asked things like whether they feel comfortable talking about data with other students, rather than about content."

"We implemented these surveys in classes where they were taught the way the instructors had always taught them before, as well as in redesigned classes with new materials and professional development for instructors to focus on creating an equitable learning environment and engaging students in discourse and active engagement in scientific practices."

On the study's results, Hinojosa explains: "Confidence goes up pre- to post-survey in all courses, but the gains were more distinct in the redesigned classes." Beyond reporting higher levels of confidence, "students in the treatment group were more specific in how they would take those skills and use them in their future careers."

"We were working with a big educator group going on to be future teachers. It was great to see many planning to apply these skills in science teaching and doing science practices in their classrooms."

Q: What surprised you about the results?

A: "We were surprised by how little actual science discourse happens in introductory classrooms," Hinojosa reported. "We spent several professional development sessions focused on discourse practices, but many instructors still struggled to get students to do collaborative, small-group work."

"I was surprised that while many students often learn science content, they don't always get opportunities to participate in the kinds of conversations, problem-solving, and collaboration that scientists engage in every day. That was important because those experiences help students begin to see themselves as capable contributors to science. We often think students become scientists by learning content, but our findings suggest they also need opportunities to participate in science as a social and collaborative process."

Q: What should faculty take away or change about their intro courses?

A: "In the dissemination phase, as I lead workshops to help faculty implement these changes in their own classes, we really emphasize giving students the opportunity to engage in science with real questions that they care about. That means getting to know your students, figuring out what they care about, and honoring what they're bringing into the classroom," Egger explained. "Use that to engage in science and do science, don't just talk about science."

"I loved hearing about how instructors and their courses normalized the productive struggle. It's an important lesson in life for students, that science is messy," Hinojosa stated.

Egger added, "the materials focus on that idea of productive failure, as part of the learning process. When an experiment fails, you have learned something from it. You redesign and try again. That's part of how we learn."

Q: What might students, particularly first-generation students, take away from your work?

A: "If an introductory class makes you feel you don't belong, that's not a judgement on your ability. Your sense of belonging and your science identity grows over time through your participation and your experience," Hinojosa stated.

Egger added, "I want students to know that they are bringing valuable knowledge and skills into an intro course. My job is to build on those experiences, not replace who they are and where they come from, and to learn another way of engaging with the world and developing their identity as a scientist."

Q: What's a myth about STEM students that your research challenges?

A: "I want to challenge the myth of this division of STEM students and non-STEM students," Egger stated. "That boundary is artificial."

Hinojosa stated, "the myth about scientists not being social or stuck in their lab. Scientists collaborate every day, which is not something that's widely shared."

"In the paper, we mention scientist spotlights," where, during repeated activities in-class, these spotlights highlighted the diversity of scientists. "It was an effort to show students that there isn't one stereotype that is a scientist, it can be anybody."

Hinojosa continues their work in student and educator development as the Director of Evaluation with the K20 Center at the University of Oklahoma, where she leads evaluation efforts, supports continuous improvement, and works with schools and community partners to expand college and career readiness opportunities for students.

Egger continues to lead workshops as the PI for the TIDeS Project, encouraging faculty to implement these changes and materials in their classes.

Read the full study: International Journal of Science Education, DOI: https://doi.org/10.1080/09500693.2026.2661392.
Teaching materials from the TIDeS Project are available at: https://serc.carleton.edu/tides/teaching-materials/index.html.

"We really emphasize giving students the opportunity to engage in science with real questions that they care about. That means getting to know your students, figuring out what they care about, and honoring what they're bringing into the classroom. Use that to engage in science and do science, don't just talk about science."
- Dr. Anne Egger

The Department of Law and Justice

Department Feature

Mock Trial
This year, the Department's Mock Trial team advanced to ORCS, a remarkable accomplishment requiring dedication from each mocker and their faculty mentor.

Megan Dickinson
Administrative Assistant, LAJ

HIGHLIGHTS

The Law and Justice (LAJ) Department had an exceptionally active and successful year filled with student engagement, professional development opportunities, and community partnerships. LAJ hosted another successful Career Fair featuring 75 agencies from across Washington, Oregon, and Idaho. Students also participated in hands-on learning experiences through partnerships with the Washington Association of Prosecuting Attorneys and the Office of Public Defense, where students served as witnesses and participated in Voir Dire (jury selection) training exercises.

Additional highlights included a "Preparing for Law School" panel featuring attorneys, current law students, and the Associate Director of Seattle University School of Law Admissions. The 2nd annual LAJ Expo welcomed 10 law enforcement agencies recruiting CWU students and showcased helicopters, bearcats, and motorcycles. LAJ also partnered with the Ellensburg Police Department for the inaugural C.H.A.S.E. Internship program, providing five students with immersive experiences in law enforcement and community engagement throughout the academic year.

The department's Mock Trial Team also advanced from Regionals to the Opening Round Championship Series (ORCS) in Phoenix, Arizona.

EVENTS

Farewell to Farrell
June 5 2026 11:00 AM
Farrell Hall East Lawn
Open to all

LAJ Graduate Hooding Ceremony
June 12 2026 6:00 PM
Sue Lombard

SPOTLIGHTS

Congratulations to the following LAJ faculty members for their recent accomplishments:

- **Roger Schaefer** on his promotion to Full Professor
- **Sara Toto** on her promotion to Associate Professor
- **Saul Chacon** on earning his Ph.D. from Gonzaga University
- **Shinhae Hwang** who received the COTS Celebration of the Sciences award for LAJ.

The Next Course in 'A Bite of Science'

May's installment of 'A Bite of Science' saw a widely-attended and successful talk delivered by Dr. Jocelyn Akins, a conservationist and the founder and Executive Director of Cascade Carnivores Project. The series, hosted by the College of the Sciences, the Departments of Biology, Chemistry, and Geography, in partnership with The Ridge Restaurant & Bar, returns in June for its final talk for the 2025 - 2026 academic year.

In June's installment, the Department of Chemistry is proud to introduce Dr. Joshua Kirk, DMD, for 'A Bite of Dental Chemistry.'

Dr. Kirk is a local dentist and owner of Mountain View Dental in Ellensburg. He is a CWU alumnus and graduated from Midwestern University College of Dental Medicine in Arizona. He was awarded a Fellowship in the Academy of General Dentistry after years of additional education and extensive testing.

Join Dr. Kirk in a conversation exploring the science of dentistry, navigating health advice through the noise and confusion, and thinking scientifically on information that impacts our health decisions. The seminar is open to the public.

'A Bite of Science' will return in Fall 2026. The seminars are hosted every second Tuesday of each month during the academic year.

SEE THE SCHEDULE
and previous seminars online
cwu.edu/sciences/outreach/a-bite-of-science-seminar-series

TUESDAY JUNE 9
5:30 PM | SEMINAR STARTS 5:45 PM
THE RIDGE RESTAURANT & BAR
404 N PINE ST, ELLENSBURG, WA

Working with Community
During a routine hygiene appointment, Dr. Kirk works on a patient. Dr. Kirk's practice also explores the usage of 3D printing within dentistry.

End of Year Celebrations

Celebrating Geographers
During the Department of Geography's End of Year Celebration on June 3, Dr. Megan Walsh presents students graduating with degrees and additional credentials. The event also featured the induction of new members into Gamma Theta Upsilon, the Geographical Honors Society.

SAVE THE DATE
Don't forget to attend your department's End of Year Celebration!

The College of the Sciences transforms bold ideas into real-world impact. COTS is where curiosity, innovation, and the pursuit of knowledge converge to shape a brighter future.

Students, faculty, and community partners unite around a shared mission—advancing scientific discovery, addressing real-world challenges, and preparing the next generation of innovators, researchers, and leaders who will shape the future of science and society.

Your support powers groundbreaking research, expands hands-on learning, and equips students with the tools to excel in a rapidly changing world. Together, we are building the future through discovery, innovation, and education.

Join us and support shape what comes next!

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