Nicole Lapeyrouse, Ph.D.
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Profile

- Awarded the 2025 Academic Success Partner of the Game
- Awarded 2024 Excellence in Instructional and Teaching Practice by the Online Learning Consortium.
- Awarded 2023 AIM High Impact Individual Award Recipients
- Awarded Undergraduate Research Mentor of the Year in 2022 by the Office of Undergraduate Research and the Student Undergraduate Research Council.
- Awarded Outstanding Performance in Service to the Chemistry Department and Outstanding Performance in Professional Development
- Develop unique multimedia to increase student experiences in chemistry and geology courses, increase student retention, and contribute to developing affordable course materials.
- Disseminated research at national, regional, and local conferences. I have also supported and mentored graduate and undergraduate students to present their findings and publish their works.

Education

Doctorate of Philosophy in Chemistry **2018**
University of Central Florida, Orlando, Fl
Research field: Remediation of Chlorinated Alkanes by Zero Valent Iron with Vitamin B12 and Utilization of a Modified Gradual Release of Responsibility Model in a Large Enrollment Chemistry Course
Advisor: Dr. Cherie Yestrebsky

Masters in Chemistry **2016**
University of Central Florida, Orlando, Fl
Research field: Remediation of Chlorinated Alkanes by Zero Valent Iron with Vitamin B12 and Utilization of a Modified Gradual Release of Responsibility Model in a Large Enrollment Chemistry Course
Advisor: Dr. Cherie Yestrebsky

Bachelor of Science in Chemistry (ACS certified) **2013**
Florida International University, Miami, Fl
Area of concentration: Analytical chemistry

Publication/Presentation Summary

Publications: 5 total
Invited speaker: 10 total
Workshop Organizer: 4 total
Symposium organizer: 5 total
Presentations: 80 total since starting at UCF (Lifetime: **95** total)

Proposal Summary

Internally Funded Grants Awarded: 1 total $15,500

Teaching Summary

Total unique courses taught: 6 total
Graduate students: 1 total
Undergraduate research students: 9 total

Service and Outreach Summary

Service to the College

1. Member of the Knights Empowerment Program (2025-Present). The overall goal of this committee to encourage faculty to implement best practices for students, especially during the first two years of enrollment.
2. Participated in meetings with the State University System Labs Taskforce. These meetings kept us informed of what other university systems were adopting during the transition to online labs during COVID.

Service to the department

1. Chair of the diversity committee (2021- Present). The overall goal of this committee is to develop initiatives to increase diversity and representation in the chemistry department.
2. Member of the Marketing Committee (2021-Present), which aims to increase the visibility of the accomplishments of our Faculty and students and the programs offered by our department.
3. Member of the Undergraduate Curriculum Committee (2021- Present),

Service to the community

1. Built strong connections to Orange County Public School Systems by being a Chemistry Faculty Fellow
2. Held multiple positions with the local American Chemical Society and helped organize the 2025 Southeast and Southwest Regional Meeting for the American Chemical Society in Orlando, Fl.
3. Volunteered with the local American Chemical Society Orlando section at the Science Center (2021 and 2022) and Earth Day at Lake Eola (2021, 2022, and 2023).

Awards, Honors, and Recognition

1. Nov. 7, 2025: Academic Success Partner of the Game
    - During a UCF football home game, the university honors a faculty member who exemplifies excellence and dedication in their teaching and has a significant impact on student-athletes. This is a student-nominated award.
2. Apr 10, 2025: Faculty that send more graduate or undergraduate students to conferences
    - This award is presented to a faculty member who sends more graduate or undergraduate students to conferences.
3. Feb. 2024: Honorable Mention for Dziuban Award for Excellence in Online Teaching
4. Dec. 2024: Inclusive Design Professional Development Award by the College of Sciences. This award recognizes your commitment to implementing inclusive best practices in your classroom and your achievement in earning the COS Inclusive Design Badge.
5. Nov. 2024: Awarded Excellence in Instructional and Teaching Practice by the Online Learning Consortium.
    - This award is presented to an individual who has shown effective practices in online and/or blended teaching effectiveness with documented impact on equity, learning effectiveness, and student outcome achievement
6. Apr 22, 2024: College of Science Research Dissemination and Travel (DT) Awards
    - The College of Sciences presents two award opportunities for faculty, the Research Dissemination and Travel (DT) Awards. The overall goal of this award program is to support activities that allow faculty to achieve prominence in graduate study and research while increasing UCF's national and international recognition.
7. Feb 2024, 2023, 2022, and 2021: Recognized for using Open Educational Resources (OER)
    - This event also recognizes faculty who used open educational resources (OER) and offered students a zero-cost course materials experience during the previous calendar year. OER is a great way to reduce the cost of instructional materials by using publicly available resources, such as OpenStax, or allowing faculty members to create their own open resources for students and colleagues to access.
8. Feb 2024, 2023, 2022, and 2021: UCF Faculty recognition for First Day®
    - The First Day® program allows faculty members to work with commercial publishers and other for-profit entities to set an agreement with Barnes & Noble to offer discounted pricing on their course materials. Students may choose to "opt-in" to receive their course materials at the discounted price in their Webcourses@UCF course before the Drop/Add period each semester.

Faculty participating in the First Day® program during the previous calendar year are recognized during the event.

9. Apr 13th, 2023: Successful Course Design or Transformation
    - Faculty representing every area in the College of Sciences were honored for their commitment to excellence at the Spring 2023 Faculty Recognition Event. https://sciences.ucf.edu/news/faculty-recognized-excellence-instruction-mentoring/
10. Apr 6th, 2023: Excellence in Undergraduate Teaching
    - The In-Unit Excellence in Undergraduate Teaching Award recognizes outstanding undergraduate-level teaching.
11. Feb 2023: Award 2023 AIM High Impact Individual Award Recipients
    - The AIM High Impact Award recognizes an individual or a group of individuals who have made a significant impact and commendable efforts toward affordable instructional materials. The award guidelines are flexible to equally recognize faculty from across the university who teach various levels and class sizes.
12. Apr 7, 2022: Outstanding Performance in Service to the Chemistry Department
    - This award is from the Department of Chemistry to recognize a Faculty member's service to the department that was impactful to the University
13. Apr 7, 2022: Outstanding Performance in Professional Development
    - This award is from the Department of Chemistry to recognize a Lecturer who pursued professional development and applied the skills obtained to improve teaching at department, college, and university levels.
14. Mar 2022: 2021-2022 Undergraduate Research Mentor of the Year
    - This award is sponsored by the Office of Undergraduate Research and the Student Undergraduate Research Council (SURC). It is designed to honor outstanding faculty mentors supporting undergraduate research across the UCF campus and within their research teams. Undergraduate students nominate for this award, and two students nominated me for this award.
15. Feb 2022: 2022 UCF Honorable mention for the Individual AIM Impact Award
    - The AIM High Impact Award recognizes an individual or a group of individuals who have made a significant impact and commendable efforts toward affordable instructional materials. The award guidelines are flexible to equally recognize faculty from across the university who teach various levels and class sizes.
16. Dec 2021: Volunteer Recognition for ACS Orlando Section
    - Recognized for my contribution to volunteering with the local ACS Orlando section

Teaching & mentorship

Classes Taught

I have developed and redesigned numerous undergraduate courses and received quality (2021) and high-quality review (2021) for my online Introduction to geology course. I have significantly increased enrollment in geology from 50 students to 200 students enrolled.

Undergraduate Courses and modalities taught in

- GLY 1030: Geology and its Application – Modalities: Face-to-Face and Online (200 seats)
- CHM 1020: Concepts in Chemistry – Modality: Online (500 seats)
- CHM 2041b: Chemistry Fundamentals 1B – Modalities: Face-to-Face and Mix-mode (450 seats)
- CHM 2045: Chemistry Fundamentals 1: Modalities: Face-to-Face, Mix-mode, and Video Streaming/Reduced Seat Time (450 seats)
- CHM 2046L: Chemistry Fundamentals II Laboratory: Modality: Face-to-Face and Online (505 seats)
- CHM 2205: Introduction to Organic and Biochemistry: Modality: Face-to-Face (70 seats)
- CHM 4930 and 4931: Seminar 1 and 2. Modality: Face-to-Face (100 seats)

Research Students

Doctoral Research – PI, committee chair:

1. Cameron Bechard, 2021-Present, Investigating students' STEM Professional identity

Doctoral Research – Committee member:

1. Morgan Peters, 2023-Present, Development and utility of single sperm genetic analysis methods to aid sexual assault investigations
2. Kathleen Lugo, 2022-Present, Professional development of chemistry Graduate Teaching assistants (GTA's) in relation to Universal Design for Learning (UDL) practices
3. AJ Sona, 2021-2023, Professional development to reduce international teaching assistant anxiety in the chemistry active learning classroom

Undergraduate Research – Direct Supervision

1. Daniel Sebastien, 2024-Present, Investigating student perception of an electronic notebook in Chemistry Fundamentals 1
2. Charabelle Handfield, 2025-Present, Investigating student perception of an electronic notebook in Chemistry Fundamentals 1
3. Paula Libos, 2023-Present, Investigating student success in Chemistry Fundamentals 1 using mastery paths
4. Macayla Barnett, 2023-Present, Investigating STEM identity
5. Jackson Ellis, 2023-Present, Investigating STEM identity
6. Abigail Castillo, 2022-Present, Investigating STEM identity
7. Angelo Cinque, 2022-2023, Graduated, Investigating student experience and success in Chemistry Fundamentals 1 using mastery paths
8. Catalina Lopez-Castilla, 2020 – 2023, Diversity and inclusivity in chemistry textbooks
9. Morgan Brackett, 2020 – 2023, Graduated BS, Diversity and inclusivity in chemistry textbooks
10. Barbara Chiu, 2020 – 2022, Graduated BS, Student perception on the transition of their courses during emergency remote teaching
11. Cameron Bechard, 2020 – 2021, Graduated BS, Utilizing creative exercises in a fundamental chemistry course for remote instruction

Undergraduate Research – Co-Mentored Supervision

12. Jennifer Miller, BS, 2023-Present, Mastery Paths, co-mentored with Tamra Legron-Rodriguez
13. Bethany Arcaya, BS, 2020-2021, Chemistry Learning spaces, co-mentored with Julie Donnelly
14. Brianna Ewing, BS, 2020-2021, Chemistry Learning spaces, co-mentored with Julie Donnelly
15. Michaela Kelly, BS, 2019-2021, Chemistry Learning spaces, co-mentored with Julie Donnelly

Open educational resources (OER) developed

Creating and adopting affordable course materials to reduce student costs and increase accessibility is a goal for each course I teach. I have developed numerous unique multimedia to increase student experiences in my courses and student retention. I have filmed, edited, and written the content in my educational content. I have also worked in collaboration with Julie Donnelly and Matt Rex to adopt/adapt an Open Education Resource Textbook to be adopted for UCF chemistry courses (CHM 1025, CHM 2045, and CHM 2046). This work was supported by an internal grant from the Course Redesign Initiative (total funds: $15,000). This textbook was curated to match our learning objectives and to offer students and faculty a free alternative textbook to decrease student costs and to make learning more affordable. This textbook is free to any individual or student at any institution.

Education resources created:

1. Open Education Textbook (in progress): https://pressbooks.online.ucf.edu/chemistryfundamentals/
2. Geology video examples:
    a. Lecture-based videos:
    b. The rock cycle: https://youtu.be/5OOZvszLJwA
    c. Introduction to theories surrounding earthquakes: https://youtu.be/paHGwTMRI8I
3. Chemistry video examples:
    a. Lecture-based videos:
        i. Aqueous solutions: https://youtu.be/K2spduiRj70
        ii. Heat capacity: https://youtu.be/ZH8G2xswrvE
    b. Worked out problems on a lightboard:
        i. Calculating Work: https://youtu.be/dLsqYHvfHbY?feature=shared
        ii. Balancing chemical equations: https://youtu.be/lQz1p0X0hUw?feature=shared

Outcomes related to OER work:

Apr 10, 2025: Faculty that send more graduate or undergraduate students to conferences

- This award is presented to a faculty member who sends more graduate or undergraduate students to conferences.

Dec. 2024: Inclusive Design Professional Development Award by the College of Sciences. This award recognizes your commitment to implementing inclusive best practices in your classroom and your achievement in earning the COS Inclusive Design Badge.

Feb 2025, 2024, 2023, 2022, and 2021: Recognized for using Open Educational Resources (OER)

- This event also recognizes faculty who used open educational resources (OER) and offered students a zero-cost course materials experience during the previous calendar year. OER is a great way to reduce the cost of instructional materials by using publicly available resources, such as OpenStax, or allowing faculty members to create their own open resources for students and colleagues to access.

Feb 2025, 2024, 2023, 2022, and 2021: UCF Faculty Recognition for First Day®

- The First Day® program allows faculty members to work with commercial publishers and other for-profit entities to set an agreement with Barnes & Noble to offer discounted pricing on their course materials. Students may choose to "opt-in" to receive their course materials at the discounted price in their Webcourses@UCF course before the Drop/Add period each semester. Faculty participating in the First Day® program during the previous calendar year are recognized during the event.

Feb 2023: Award 2023 AIM High Impact Individual Award Recipients

- The AIM High Impact Award recognizes an individual or a group of individuals who have made a significant impact and commendable efforts toward affordable instructional materials. The award guidelines are flexible to equally recognize faculty from across the university who teach various levels and class sizes.

Professional Experience

Experience

Associate Lecturer **August 2025**

Lecturer **May 2020-Present**

University of Central Florida, Orlando, Fl

Department of Chemistry

- General chemistry lecturer
    - Lecture and educate undergraduate students in chemistry courses
- Developed unique and novel online course materials for fundamentals of chemistry and introduction to geology, including novel multimedia
- Created and transitioned Introduction to geology to be a fully online course and increased enrollment from 50 students to 200 students enrolled
    - Received quality (2021) and high-quality review (2021) for introduction to geology
- Incorporated active learning styles to increase student engagement in face-to-face, hybrid, and online courses
- Developed and organized a new format for discussion sessions for fundamentals of chemistry 1 and chemistry for engineering courses
- Collaborated with general chemistry instructors to standardize content and assessments
- Mentored course graduate teaching assistants regarding teaching assignment expectations

Chemistry Education Researcher

- Implementation of research-based teaching methods in fundamental chemistry and geology courses
- Designed a fundamental chemistry course to be mix-mode by using novel multimedia instruction
- Incorporated teaching methods that are suitable for different learning heuristics
- Focused on improving student outcomes for under-represented minorities
- Developed strategies to assess student performance in a large lecture setting
- Mentored and trained undergraduate teaching assistants to assist in large lecture courses and organize weekly teaching meetings

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International Activities Committee Member **January 2020-Present**

Division of Chemical Education

- Engaged and connected with other networks of chemistry educators with global interests
- Exchanged ideas about chemistry education research and practices that promote equity and diversity in chemistry education
- Awarded travel awards for early career researchers to attend international conferences

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Local ACS Section

Orlando, Fl

Alternate Councilor **2025**

Immediate Past Chair **2024**

- The immediate past Chair is automatically placed as an at-large Executive Committee member for one year and serves as a mentor to the Chair.

Chair **2023**

- The section chair's primary and ongoing functions are supervising, coordinating, and overall directing section activities.
- Another important duty of the office is ensuring the timely filing of the section's annual report. The chair makes all section standing committee appointments.

Chair-Elect **2022**

- Serve as program chair and has the principal responsibility for planning and arranging the section's meeting programs for the year while in this position

- Attended ACS Leadership Institute three-day conference, which provides training as well as ideas about programs and activities for new section officers

Adjunct Lecturer **2017-2020**

Seminole State College, Sanford, Fl

Department of Physical Sciences

- Lectured and educated undergraduate students in chemistry courses with corresponding laboratory component
- Incorporated active learning styles to increase student engagement

Lecturer **2019**

University of Florida, Gainesville, Fl

Department of Chemistry

- General chemistry lecturer
- Developed and created online general chemistry courses and educational content
- Collaborated with general chemistry instructors to standardize content and assessments
- Mentored course graduate teaching assistants regarding teaching assignment expectations

Water Chemistry Professional Intern **2014**

Walt Disney World, Orlando, Fl

Animal Programs - Disney's Animal Kingdom® and Epcot® Theme Parks

- Analyzed salt and freshwater aquatic animal systems and marine mammal holding areas daily with analytical instrumentation including Dissolved Oxygen, ORP & pH Sensors, Spectrophotometers, TOC Analyzer, Ion Chromatograph
- Collected field samples from reptile, terrestrial mammal, and avian aquatic habitats weekly for routine chemical analysis
- Maintained superb water quality in animal habitats and park attractions to ensure animal health and guest safety
- Monitored filtration and chemical injection systems and taking corrective action as necessary to ensure efficient and effective water treatment
- Organized and took care of the upkeep of the instruments and water chemistry laboratories at Animal Kingdom® Theme Park and The Seas with Nemo & Friends® Pavilion chemistry laboratories

Reviewer experience

- Chemical Engineering Journal
- Journal of Chemistry Education
- Environmental Engineering Science
- International Journal of Technology in Education and Science
- Journal of Geoscience Education

Research Experience

Proposal Summary

Internally Funded Grants Awarded: 1 total $15,500

Research Interests

- Investigating student' perception of teaching practices and their experience with unique multimedia
- Evaluating STEM instructor materials
- Identify potential factors that influence students' perceptions of being a professional in their major and their connection to their field of study.

Publication/Presentation Summary

Publications: 5 total
Invited speaker: 10 total
Workshop Organizer: 4 total
Symposium organizer: 5 total
Presentations: 80 total since starting at UCF (Lifetime: **95** total)

Publications, Symposiums, and Presentations (*Undergraduate researcher, Graduate researcher, ‡Corresponding author)

Publications

1. **Bechard, C.**, ***Ellis, J.**, **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** E. Adopting the PISQ-5d for STEM Identity: Modifying 'Practices' to better represent the STEM population. [In preparation]
2. **Bechard, C.**, ***Castillo, A.**, **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Exploring potential factors that can impact students' professional identity in STEM. [In preparation]
3. Lindquist, A., Barnett, M., Bechard, C., Legron-Rodriguez, T., and ‡**Lapeyrouse, N.** Undergraduate STEM identity: Future professionals self-perception of their STEM major [In preparation]
4. Paradiso, J., Ford, C., **Lapeyrouse, N**., & Lahcen, R. A. M. (2024, December 10). Leveraging Open and Adaptive Learning Technologies at Scale: Faculty Reflections on Course Design and Instructional Practices. OSF. https://doi.org/10.35542/osf.io/zp5dr [**Pre-print Open access article**]
5. Paradiso, J.R**, Libos., P, Bechard, C.**, and ‡**Lapeyrouse, N.** Leveraging Deterministic Algorithms to Personalize Education and Enhance Student Success: The Story of an Engineered Learning Experience. Springer. HCI International 2025.
6. **Cinque., A, Miller, J**., Legron-Rodriguez, T., Paradiso, J.R**,** and ‡**Lapeyrouse, N.**; "Student Perceptions of Adaptive Learning Modules for General Chemistry" Springer. HCI International June, 2024. https://doi.org/10.1007/978-3-031-60609-0_8
7. B. Chiu, C. Yestrebsky, N. Lapeyrouse (2023) Teaching Through The Pandemic: Evaluating Students' Experience In An Online Introductory Geology Course, INTED2023 Proceedings, pp. 2564-2571. https://doi.org/10.21125/inted.2023.0716
8. Barbara Chiu*, and ‡**Nicole Lapeyrouse**. "Student Experiences and Perceptions of Emergency Remote Teaching." Advances in Online Chemistry Education. American Chemical Society, 2021. 123-134. DOI: 10.1021/bk-2021-1389.ch009
9. ‡**Nicole Lapeyrouse** and Cherie Yestrebsky. "Adaptation and Assessment of a Gradual Release of Responsibility Model for a Large-Enrollment General Chemistry Course." Enhancing Retention in Introductory Chemistry Courses: Teaching Practices and Assessments. American Chemical Society, 2019. 137-146.
10. **Nicole Lapeyrouse**, Muqiong Liu, Shengli Zou, Greg Booth, and ‡Cherie L. Yestrebsky, "Remediation of Chlorinated Alkanes by Vitamin B12 and Zero-Valent Iron," Journal of Chemistry, vol. 2019, Article ID 7565464, 2019. https://doi.org/10.1155/2019/7565464.

Symposium organizer

1. **Nicole Lapeyrouse and Tamra Legron-Rodriguez**, Inclusive practices for unrepresented groups in STEM, Biennial Conference on Chemical Education, July 28th – August 1st, 2024
2. **Julie Donnelly and Nicole Lapeyrouse**, Chemistry Education Research: Undergraduate Student Research Symposium, Biennial Conference on Chemical Education, July 28th – August 1st, 2024
3. **Christopher Randles and Nicole Lapeyrouse**, Undergraduate student research symposium, Southeastern Regional Meeting of American Chemical Society, October 25th – 28th, 2023
4. **Nicole Lapeyrouse and Tamra Legron-Rodriguez**, Inclusive practices for unrepresented groups in STEM, Biennial Conference on Chemical Education, July 31st – August 4th, 2022
5. **Julie Donnelly and Nicole Lapeyrouse**, Undergraduate student research symposium, Biennial Conference on Chemical Education, July 31st-August 4th, 2022

Invited Webinars and Invited Speaker (!Speaker; *Undergraduate researcher, Graduate researcher, ‡PI)

1. **Lapeyrouse, N., Fredericksen, E., Blease, K., and Barth, D.** AC24 Awards of Excellence Winners: A Panel Discussion. Online Learning Consortium Conference. Orlando, FL. November 18-21, 2024.
2. ‡,!**Lapeyrouse, N.** How to engage students: Instructional scaffolding and universal design of learning. Umeå University, Sweden, May 25th, 2023
3. ‡,!**Lapeyrouse, N.** Creating content that engages students. Umeå University, Sweden, May 25th, 2023
4. ‡,!**Lapeyrouse, N.** Investigating Student Perception of Unique Multimedia for large enrollment courses and creating an Open Education Resource. Umeå University, Sweden, May 8th, 2023
5. **Bechard, C.**, **Legron-Rodriguez, T.,** and ‡,!**Lapeyrouse, N.** Investigating students' STEM identity at a large Hispanic Serving Institution. Umeå University, Sweden, May 5th, 2023
6. **Nicole Lapeyrouse**, Panel Speaker for FCTL Summer Conference for Open Educational Resources, UCF Faculty Center for Teaching and Learning, What You Never Knew You Wanted to Know about Open Educational Resources and Practices (OER/OEP): The Faculty Experience , May 9th-12th, 2022
7. **Nicole Lapeyrouse**, Panel Speaker for Course Redesign Initiative, UCF Faculty Center for Teaching and Learning, March 04, 2022
8. **Nicole Lapeyrouse**, "Ask a Professor". Guest Speaker, Orange County Public School System, December 02, 2021
9. **Nicole Lapeyrouse**, Instructional scaffolding and universal design of learning. Guest Lecturer, Orange County Public School System, November 10, 2021
10. **Nicole Lapeyrouse**, UTA/ULA Workshop: Advantages and Benefits. Guest Speaker, UCF College of Sciences, September 29, 2020
11. **Nicole Lapeyrouse**, Creating recorded content and best practices for remote teaching. Webinar presentation, Umeå University, Sweden, June 16th, 2020

Workshops

1. **Lapeyrouse, N. and Paradiso, J.** Increase Student Success Using Webcourses@UCF "Mastery Paths". UCF Center for Distributed Learning. April 22, 2025.
2. ‡,!**Lapeyrouse, N.** Designing course modules and incorporating adaptive learning assessments. Umeå University, Sweden, June 1st, 2023
3. ‡,!**Lapeyrouse, N.** Designing Unique Multimedia for Higher Education. Umeå University, Sweden, May 29th, 2023
4. ‡,!**Lapeyrouse, N.** Strategies on how to engage students in a Digital room. Umeå University, Sweden, May 24th, 2023
5. ‡,!**Lapeyrouse, N.** and **Legron-Rodriguez, T.,** Integrating Universal Design for Learning when developing an online course. Umeå University, Sweden, May 16th, 2023

Oral Presentations (!Speaker; *Undergraduate researcher, Graduate researcher, ‡PI)

1. !**Bechard, C.**, ***Ellis, J.,** **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** External validation: Insight into the affirmation and reconsideration of commitment of organic chemistry students within the PISQ-5d identity statuses. ACS Spring 2025 National Meeting & Expo, San Diego, CA. March 23rd -27th, 2025
2. *,!**Ellis, J., Bechard, C.**, **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Exploring students' relationship to their STEM major. ACS Spring 2025 National Meeting & Expo, San Diego, CA. March 23rd -27th, 2025

3. *,!Barnett, M., *Lindquist, A., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Student's STEM identity: Exploring how undergraduate STEM majors perceive their majors. ACS Spring 2025 National Meeting & Expo, San Diego, CA. March 23rd -27th, 2025
4. *,!Libos, P., Bechard, C., and ‡**Lapeyrouse, N.** Evaluating the impact of student performance using canvas mastery paths in general chemistry. ACS Spring 2025 National Meeting & Expo, San Diego, CA. March 23rd -27th, 2025
5. *,!Lindquist, A., Barnett, M., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Understanding the factors that influence STEM students' relationship with their major and future profession. ACS Spring 2025 National Meeting & Expo, San Diego, CA. March 23rd -27th, 2025
6. ‡,!**Lapeyrouse, N.**, !**Legron-Rodriguez, T., and** !**Paradiso, J.,** Adding Value to Student Learning Without Any of the Extra Cost: Personalizing Learning & Instruction with Canvas Mastery Paths. Digital Learning Day. September 27, 2024.
7. *,!Ellis, J., *Castillo, A., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Exploring Students' Professional Identity to Their STEM Major. Biennial Conference on Chemical Education, Lexington, Kentucky, July 28th -August 1st, 2024
8. *Castillo, A., !Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Analyzing Potential Factors That Can Impact Students' Professional Identity in Forensic Science. Biennial Conference on Chemical Education, Lexington, Kentucky, July 28th -August 1st, 2024
9. !Bechard, C., *Castillo, A., *Ellis, J., ‡**Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N**. Application of the PISQ-5d survey: Comparing and contrasting written responses of PISQ-5d questions based on STEM Identity. Biennial Conference on Chemical Education, Lexington, Kentucky, July 28th -August 1st, 2024
10. !Bechard, C., *Castillo, A., *Ellis, J., ‡**Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N**. Investigating External Factors That Impact STEM Student's Relationship With Their Major and Future Profession. Biennial Conference on Chemical Education, Lexington, Kentucky, July 28th -August 1st, 2024
11. *,!Barnett, M., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Undergraduate students' self-perception regarding their STEM professional futures. Biennial Conference on Chemical Education, Lexington, Kentucky, July 28th -August 1st, 2024
12. *,!Lindquist, A., Barnett, M., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Investigating External Factors That Impact STEM Student's Relationship With Their Major and Future Profession. Biennial Conference on Chemical Education, Lexington, Kentucky, July 28th -August 1st, 2024
13. !Bechard, C., *Ellis, J., *Castillo, A., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N**. Student responses to a modified PISQ-5D survey: How undergraduate students in chemistry courses relate to being a future professional in their field. Florida Annual Meeting and Exposition. Innisbrook, FL. May 31st-June 1st, 2024.
14. *,!Miller, J., Cinque., A, **Lapeyrouse, N., and** ‡**Legron-Rodriguez, T.** Examining Student Perspectives of Adaptive Learning Modules in General Chemistry. Florida Annual Meeting and Exposition. Innisbrook, FL. May 31st-June 1st, 2024.
15. *,!Barnett, M., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** STEM identity of undergraduate students: Future professionals' self-perception. Florida Annual Meeting and Exposition. Innisbrook, FL. May 31st-June 1st, 2024.
16. *,!Ellis, J., *Castillo, A., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Understanding STEM Identity on Student Academic Progression in General Chemistry. Florida Annual Meeting and Exposition. Innisbrook, FL. May 31st-June 1st, 2024.
17. *,!Barnett, M., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Undergraduate student's STEM identity: Students perception of their future profession. ACS Spring 2024 National Meeting & Expo, New Orleans, LA. March 17th-21st, 2024
18. *,!Ellis, J., *Castillo, A., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** STEM Identity: How students' see themselves as future STEM graduates. ACS Spring 2024 National Meeting & Expo, New Orleans, LA. March 17th-21st, 2024
19. !Bechard, C., *Castillo, A., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** STEM Identity: How students' see themselves as future STEM graduates. ACS Spring 2024 National Meeting & Expo, New Orleans, LA. March 17th-21st, 2024

20. *,!Miller, J., Cinque., A, **Lapeyrouse, N., and ‡Legron-Rodriguez, T.** Examining end-of-semester student perspectives of adaptive learning modules. ACS Spring 2024 National Meeting & Expo, New Orleans, LA. March 17th-21st, 2024
21. *,!Castillo, A., Bechard, C., **Legron-Rodriguez, T.,** and **‡Lapeyrouse, N.** Investigating Potential Factors That Can Impact Students' Professional Identities in Forensic Science. 76th American Academy of Forensic Sciences Conference. Denver, Co. February 19th-24th, 2024
22. *,!Cinque., A, Miller, J., **Legron-Rodriguez, T.,** and **‡Lapeyrouse, N.** Student feedback on their experience using mastery paths in general chemistry. Southeastern Regional Meeting of American Chemical Society, October 25th – 28th, 2023
23. *,!Miller, J., Cinque., A, **Lapeyrouse, N.** and **‡Legron-Rodriguez, T.,** Examining student perspectives of canvas mastery path adaptive learning modules. Southeastern Regional Meeting of American Chemical Society, October 25th – 28th, 2023
24. *,!Cinque., A, Miller, J., **Legron-Rodriguez, T.,** and **‡Lapeyrouse, N.** Students perception of adaptive learning modules for general chemistry. ACS Fall 2023 National Meeting & Expo, San Francisco, CA, August 13-17, 2024.
25. *,!Hillsman, P. Higdon, R., Harshman, J., **Lapeyrouse, N., ‡Donnelly, J.** The influence of physical space on the learning environment: STEM faculty perspective. ACS Spring 2023 National Meeting & Expo, Indianapolis, IN, March 26-30, 2023.
26. *,!Sand, J., *Arcaya, B., *Ewing, B., **Lapeyrouse, N., ‡Donnelly, J.** Drawing their ideal learning space: Chemistry faulty knowledge about the relationship between physical space and pedagogy. ACS Spring 2023 National Meeting & Expo, Indianapolis, IN, March 26-30, 2023.
27. !Bechard, C., **Legron-Rodriguez, T.,** and **‡Lapeyrouse, N.** Investigating Changes in Undergraduate Students' Identity Statuses using the PISQ-5D Survey. National Meeting of the American Chemical Society (ACS). Indianapolis, IN. March 26th-30th, 2023
28. *Castillo, A., Bechard, C., **Legron-Rodriguez, T.,** and **‡Lapeyrouse, N.** Exploring potential factors that can impact students' professional identity in STEM. National Meeting of the American Chemical Society (ACS). Indianapolis, IN. March 26th-30th, 2023
29. *,!Lopez-Castilla, *,!Brackett, M., C., Chiu, B., **Legron-Rodriguez, T.,** and **‡Lapeyrouse, N.** Investigation of How Individuals are Represented in College General Chemistry Textbooks. National Meeting of the American Chemical Society (ACS). Indianapolis, IN. March 26th-30th, 2023
30. *Chiu, B., Yestrebsky, C., and ‡,!**Lapeyrouse, N**. Teaching through the pandemic: evaluating students' experience in an online introductory geology course. 17th International Technology, Education and Development Conference. Valencia, Spain. March 6th - 8th, 2023
31. ‡,!**Lapeyrouse, N**. Transforming the Online Student Experience with the Use of Novel Multimedia for Introductory STEM Courses. 2022 Ohio PKAL Regional Network Fall Meeting, October 29th, 2022.
32. *,!Lopez-Castilla, C., Brackett, M., Chiu, B., and **‡Lapeyrouse, N.**. Investigating gender bias in college general chemistry textbooks. Florida Annual Meeting and Exposition. Innisbrook, FL. Aug 4th - 7th, 2022.
33. *,!Chiu, B. and **‡Lapeyrouse, N**.. Emergency Remote Teaching: Best Practices and Student Experiences. Florida Annual Meeting and Exposition. Innisbrook, FL. Aug 4th - 7th, 2022.
34. !Bechard, C., **‡Legron-Rodriguez, T.,** and **‡Lapeyrouse, N**. Student responses to a modified PISQ-5D survey: How undergraduate students in chemistry courses relate to being a future professional in their field. Florida Annual Meeting and Exposition. Innisbrook, FL. Aug 4th - 7th, 2022.
35. !Bechard, C., **‡Legron-Rodriguez, T.,** and **‡Lapeyrouse, N**. STEM Professional Identities: Investigating how students at a Hispanic- serving institute identify., Biennial Conference on Chemical Education, July 31st - August 4th, 2022
36. *,!Brackett, M., Lopez-Castilla, C., Chiu, B., and **‡Lapeyrouse, N.** Investigating the trend of BIPOC representation in chemistry textbooks. Biennial Conference on Chemical Education, July 31st-August 4th, 2022
37. ‡,!**Lapeyrouse, N**. and *Chiu, B. Investigating student perception of course materials developed during the pandemic for introductory STEM courses. Biennial Conference on Chemical Education, July 31st-August 4th, 2022

38. [!]**Bechard, C.**, [‡]**Legron-Rodriguez, T.,** and [‡]**Lapeyrouse, N**. Investigating STEM student responses to the PISQ-5D survey: A mixed methods approach., Biennial Conference on Chemical Education, July 31st-August 4th, 2022
39. [*,!]Lopez-Castilla, C., Brackett, M., Chiu, B., and [‡]**Lapeyrouse, N.** Analyzing gender representation and stereotypes in college general chemistry textbooks, Biennial Conference on Chemical Education, July 31st-August 4th, 2022
40. [*,!]Chiu, B. and [‡,!]**Lapeyrouse, N**. Key Experiences and Best Practices for Emergency Remote Learning. Biennial Conference on Chemical Education, July 31st-August 4th, 2022
41. [!]Donnelly, J., [!]**Lapeyrouse, N.**, [!]Rex. M., [!]Legron-Rodriguez, T., and [!]Paradiso, J. Adaptation and Adoption of OER in Introductory Chemistry Courses. 2022 Capital PKAL Regional Network Conference, March 25th, 2022
42. [*,!]Brackett, M., Lopez-Castilla, C., Chiu, B., and [‡]**Lapeyrouse, N.** Investigating BIPOC representation in general chemistry textbooks. American Chemical Society National Conference, March 20th-24th, 2022
43. [*,!]Lopez-Castilla, C., Brackett, M., Chiu, B., and [‡]**Lapeyrouse, N.** Gender Representation in College General Chemistry Textbooks. American Chemical Society National Conference, March 20th-24th, 2022
44. [‡,!]**Lapeyrouse, N.** Creating unique multimedia to increase students perception and engagement of STEM courses. Curriculum Alignment Conference, March 4th, 2022
45. [‡,!]**Lapeyrouse, N.** Students perception and engagement in STEM based courses using novel multimedia. 2022 Florida Online Innovation Summit, February 23-24, 2022
46. [‡,!]**Lapeyrouse, N.** and *Chiu, B., Emergency remote teaching to a fully online course: investigating student perception of novel multimedia for an introductory geology course. Geological Society of America Connects 2021 National Conference, October 10, 2021
47. [!]Avila, S. and [!]**Lapeyrouse, N.** Faculty-Librarian Cooperation for Virtual STEM Based Courses: Creating Successful Learning Experiences for Undergraduate Students at UCF. Special Libraries Association Annual Conference, August 12, 2021
48. *Chiu, B. and [‡,!]**Lapeyrouse, N**. Student experiences and best practices for emergency remote teaching. American Chemical Society National Meeting and Exposition. Virtual Conference, April 14th, 2021.
49. *Bechard, C. and [‡,!]**Lapeyrouse, N.** Evaluating student experience with the use of creative exercises in a remote learning environment. American Chemical Society National Meeting and Exposition. Virtual Conference, April 14th, 2021.
50. [‡,!]**Lapeyrouse, N.** and Yestrebsky, C. Investigating the effect of novel multimedia resources for a mix-mode chemistry fundamentals course. American Chemical Society National Meeting and Exposition. Virtual Conference, April 6th, 2021.
51. [‡,!]**Lapeyrouse, N.** and Yestrebsky, C. Engaging students through novel multimedia. Sunshine State Teaching and Learning Conference. Virtual Conference, January 29th, 2021.
52. [!]Booth, G., **Lapeyrouse, N.**, and [‡]Yestrebsky, C. Abiotic Destruction of Chlorinated Alkanes using Catalyzed ZVI: including 1,2,3 TCP, 1,2 DCP, and 1,2 DCA. Twelfth International Conference on Remediation of Chlorinated and Recalcitrant Compounds. Portland, Oregon, May 31- June 4, 2020
    [Started as a Lecturer at UCF 5/1/2020]

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53. [!]Booth, G., **Lapeyrouse, N.**, and [‡]Yestrebsky, C. Abiotic Destruction of 1,2,3-Trichloropropane (TCP) using Catalyzed ZVI. Emerging Contaminants Summit Westminster, CO March 10-11, 2020
54. [‡,!]**Lapeyrouse, N.** and Yestrebsky, C. Comparison of course modalities for a fundamental chemistry course using novel multimedia instruction. Sunshine State Teaching and Learning Conference. Daytona Beach, FL., January 30th -February 1st, 2019.
55. [‡,!]**Lapeyrouse, N.,** [‡,!]Donnelly, J., Eugster, A., and Yestrebsky, C. Promoting Success in Gateway STEM Courses: A Comparison of Introductory Chemistry Tracks. 2019 Focus on First Generation Conference. Miami, FL. April 8th-9th, 2019.
56. **Lapeyrouse, N.**, and [‡]Yestrebsky, C. Utilizing the Gradual Release of Responsibility teaching model to engage students in a large enrollment chemistry course. 2019 Colloquium on Teaching and Learning Innovation. DeLand, FL. April 5th, 2019.

57. **Lapeyrouse, N.**, and ‡Yestrebsky, C. Remediation of chlorinated alkanes by zero-valent Iron and vitamin B12. American Chemical Society National Meeting and Exposition. Orlando, FL. March 31st -April 4th, 2019.
58. **Lapeyrouse, N.**, and ‡Yestrebsky, C. Comparison of course modalities for a fundamental chemistry course using novel multimedia instruction. American Chemical Society National Meeting and Exposition. Orlando, FL. March 31st -April 4th, 2019.
59. ‡,!**Lapeyrouse, N.,** ‡,!Donnelly, J., Eugster, A., and Yestrebsky, C.. Promoting Success in Gateway STEM Courses: A Comparison of Introductory Chemistry Tracks. Sunshine State Teaching and Learning Conference. Daytona Beach, FL., January 30th -February 1st, 2019.
60. **Lapeyrouse, N.**, and ‡Yestrebsky, C. Comparison study of the Gradual Release of Responsibility teaching model to a standard lecture model in a large enrollment introductory chemistry course. 25th Biennial Conference on Chemical Education. University of Notre Dame, July 29th -August 2nd, 2018.
61. **Lapeyrouse, N.**, and ‡Yestrebsky, C. Implementing a Gradual Release of Responsibility teaching model in a large enrollment chemistry course. Florida Annual Meeting and Exposition. Innisbrook, FL. May 3rd -May 5th, 2018.
62. **Lapeyrouse, N.**, and ‡Yestrebsky, C. Reductive dechlorination of chlorinated compounds by zero-valent iron with vitamin B12. Florida Annual Meeting and Exposition. Innisbrook, FL. May 3rd -May 5th, 2018.
63. **Lapeyrouse, N.**, and ‡Yestrebsky, C. Utilization of a Gradual Release of Responsibility model in a large enrollment introductory chemistry course. Midwestern Hispanic Serving Institute Conference, FL. May 3rd -May 4th, 2018.
64. **Lapeyrouse, N.**, and ‡Yestrebsky, C. Reductive dechlorination of 1,2-dichloroproane by ZVI with vitamin B12. 2018 UCF Graduate Research Forum. Orlando, FL. April 3rd, 2018.
65. **Lapeyrouse, N.**, and ‡Yestrebsky, C. Utilization of a Gradual Release of Responsibility model in a large enrollment introductory chemistry course. 255th American Chemical Society National Meeting and Exposition. New Orleans, LA.. March 18th -March 22nd, 2018.

Poster Presentations (!Speaker; *Undergraduate researcher, Graduate researcher, ‡PI)

1.
2. !Bechard, C., *Castillo, A., Legron-Rodriguez, T. and ‡**Lapeyrouse, N.** A Comparative Study of Self-Confidence and Future Outlook Among Forensic Science Students. The Early Career Chemistry Education Scholars Graduate Student and Postdoc Professional Development Conference. Online. July 28 – 30, 2025.
3. *,!**Sebastien, D.** and ‡**Lapeyrouse, N**. Student feedback on their experience using electronic shared notebooks in a large enrollment general chemistry course. ACS Spring 2025 National Meeting & Expo, San Diego, CA. March 23rd -27th, 2025
4. !**Bechard, C.**, ***Ellis, J.,** **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** External Validation: A Look Into the Affirmation and Reconsideration of Commitment Factors From the PISQ-5d Responses of Organic Chemistry Students. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2025.
5. *,!**Sebastien, D.** and ‡**Lapeyrouse, N**. Student Feedback on Their Experience Using Electronic Shared Notebooks in a Large Enrollment General Chemistry Course. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2025.
6. *,!**Ellis, J., Bechard, C.**, **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Factors Influencing STEM Identity Among Undergraduate Students. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2025.
7. *,!**Barnett, M., Bechard, C.**, **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** STEM Identity: Undergraduate Students' Self-Perception of Their STEM Major. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2025.
8. *,!**Libos, P., Bechard, C.**, and ‡**Lapeyrouse, N.** Examining Canvas Mastery Paths' Impact on General Chemistry I. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2025.

9. *,!**Lindquist, A., Barnett, M., Bechard, C., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Exploring External Factors That impact STEM students' relationship With Their Majors and STEM Identities. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2025.
10. *,!**Libos, P., Bechard, C.,** and ‡**Lapeyrouse, N.** Investigating the Influence of Canvas Mastery Paths in General Chemistry. *Florida Undergraduate Research Conference (FURC).* Tampa, FL. February 14th-15*th*, 2025.
11. *,!**Lindquist, A., Barnett, M., Bechard, C., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Investigating external factors influence on STEM students relationship with their major and future profession. *Florida Undergraduate Research Conference (FURC).*Tampa, FL. February 14th-15*th*, 2025.
12. *,!**Sebastien, D.** and ‡**Lapeyrouse, N**. Student Feedback on Their Experience Using Electronic Shared Notebooks in a Large Enrollment General Chemistry Course. *Florida Undergraduate Research Conference (FURC).* Tampa, FL. February 14th-15*th*, 2025.
13. **Yestrebsky, C., and ‡ Lapeyrouse, N.,** Transforming the student experience for a large enrollment chemistry course using active learning. *NU2024.* Umea, Sweden. June 17*th*-19*th*, 2024.
14. *,!**Ellis, J., Bechard, C., *Castillo, A., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Factors Influencing STEM Identity Amoung Undergraduate Students. University of Central Florida (UCF) Summer Research Poster Showcase. Orlando, FL. March 26th-27th, 2024.
15. *,!**Castillo, A., Bechard, C., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Examining Factors that can Impact Students' Professional Identity in Forensic Science. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2024.
16. *,!**Lindquist, A., Barnett, M., Bechard, C., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Exploring Factors That Impact STEM Students Relationship With Their Majors. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2024.
17. *,!**Barnett, M., Bechard, C., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Undergraduate Student's STEM Identity: Self Perception of Future Professionals. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2024.
18. *,!**Ellis, J., Bechard, C., *Castillo, A., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** STEM Identity: How Students' See Themselves as Future STEM Graduates. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2024.
19. *,!**Miller, J., Cinque., A, Lapeyrouse, N., and ‡Legron-Rodriguez, T.**. Students' End-of-Semester Perspectives on Adaptive Learning Modules. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2024.
20. !**Bechard, C., *Ellis, J., *Castillo, A., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** STEM Identity: How Students' See Themselves as Future STEM Graduates. University of Central Florida (UCF) Student Scholar Symposium. Orlando, FL. March 26th-27th, 2024.
21. *,!**Barnett, M., *Castillo, A., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Undergraduate student's STEM identity: Self-perception of future professionals. *Florida Undergraduate Research Conference (FURC).* Jacksonville, FL. February 16*th*-17*th*, 2024.
22. *,!**Ellis, J., *Castillo, A., Bechard, C., Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** STEM Identity: How students' see themselves as future STEM graduates. *Florida Undergraduate Research Conference (FURC).* Jacksonville, FL. February 16*th*-17*th*, 2024.
23. *,!**Miller, J., Cinque., A, Lapeyrouse, N., and ‡Legron-Rodriguez, T.** Students' End-of-Semester Perspectives on Adaptive Learning Modules. *Florida Undergraduate Research Conference (FURC).* Jacksonville, FL. February 16*th*-17*th*, 2024.
24. *,!**Hillsman, P. Higdon**, R., Harshman, J., **Lapeyrouse, N., ‡Donnelly, J.** The influence of physical space on the learning environment: STEM faculty perspective. 2023 UCF Student Scholar Symposium. March 27th–28th, 2023.
25. *,!**Sand, J., *Arcaya, B., *Ewing, B., Lapeyrouse, N., ‡Donnelly, J.** Drawing their ideal learning space: Chemistry faulty knowledge about the relationship between physical space and pedagogy. 2023 UCF Student Scholar Symposium. March 27th– 28th, 2023.
26. !**Bechard, C., *Castillo, A., ‡Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Examining how Undergraduate Students' Identity Status may Change in a Semester using the PISQ-5D Questionnaire. 2023 UCF Student Scholar Symposium. March 27th– 28th, 2023.

27. *Castillo, A., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Exploring Potential Factors That Can Impact Students' Professional Identity in Forensic Science. 2023 UCF Student Scholar Symposium. March 27th– 28th, 2023.
28. !Bechard, C., *Castillo, A., ‡**Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N**. Investigating Changes in Undergraduate Students' Identity Statuses using the PISQ-5D Survey. National Meeting of the American Chemical Society (ACS Sci-Mix). Virtual. March 26th-30th, 2023
29. *Castillo, A., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Exploring potential factors that can impact students' professional identity in STEM. National Meeting of the American Chemical Society (ACS Sci-Mix). Indianapolis, IN. March 26th-30th, 2023
30. *,!Lopez-Castilla, *,!Brackett, M., C., Chiu, B., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Investigation of How Individuals are Represented in College General Chemistry Textbooks. National Meeting of the American Chemical Society (ACS Sci-Mix). Indianapolis, IN. March 26th-30th, 2023
31. *Castillo, A., Bechard, C., **Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N.** Exploring Potential Factors That Can Impact Students' Professional Identity in Forensic Science. 75th American Academy of Forensic Sciences Conference. Orlando, FL. February 13th-18th, 2023
32. Bechard, C., *Castillo, A., ‡**Legron-Rodriguez, T.,** and !‡**Lapeyrouse, N**. Professional STEM Identity: Exploring how students identify within their profession and factors that impact it. 2022 South East Regional Meeting American Chemical Society. October 19th-22nd, 2022.
33. !Bechard, C., ‡**Legron-Rodriguez, T.,** and ‡**Lapeyrouse, N**. Investigating STEM Student Responses to the PISQ-5D Survey: A Mixed Methods Approach. 2022 UCF Student Scholar Symposium. March 30th-31st, 2022.
34. *,!Brackett, M., *Lopez-Castilla, C., *Chiu, B., and ‡**Lapeyrouse, N**. Evaluating the Representation of BIPOC Individuals in Chemistry Textbooks. 2022 UCF Student Scholar Symposium. March 30th-31st, 2022.
35. *,!Lopez-Castilla, C., Brackett, M., Chiu, B., and ‡**Lapeyrouse, N.** Gender Representation in College General Chemistry Textbooks. 2022 UCF Student Scholar Symposium. March 30th-31st, 2022.
36. *,!Chiu, B. and ‡**Lapeyrouse, N.** Student Perceptions of Novel Multimedia in an Online Introductory Geology Classroom. 2022 UCF Student Scholar Symposium. March 30th-31st, 2022.
37. *,!Brackett, M., *Lopez-Castilla, C., *Chiu, B., and ‡**Lapeyrouse, N**. Analyzing the Trend of BIPOC Historical chiu Representation in Chemistry Textbooks. Florida Undergraduate Research Conference. February 18th - 19th, 2022.
38. *,!Lopez-Castilla, C., Brackett, M., Chiu, B., and ‡**Lapeyrouse, N.** Representation of Women in College General Chemistry Textbooks. Florida Undergraduate Research Conference. February 18th -19th, 2022.
39. *,!Chiu, B. and ‡**Lapeyrouse, N.** Implementing Novel Multimedia in an Online Introductory Geology Classroom. Florida Undergraduate Research Conference. February 18th -19th, 2022.
40. *,!Chiu, B. and ‡**Lapeyrouse, N.** Remote Teaching: Best Practices and Students' Experience. 2021 UCF Student Scholar Symposium. Virtual Conference, April 1st, 2021.
41. *,!Bechard, C. and ‡**Lapeyrouse, N.** Investigating the Effects of Alternative Assignments on Student Attitudes in a Remote Teaching Environment. 2021 UCF Student Scholar Symposium. Virtual Conference, March 31st, 2021.
42. *,!Arcay, B., Ewing, B., **Lapeyrouse, N.**, Yestrebsky, C., and ‡Donnelly, J. Analysis of spatial hierarchy of real and ideal chemistry learning spaces. 2021 UCF Student Scholar Symposium. Virtual Conference, March 31st, 2021.
43. *,!Kelly, M., **Lapeyrouse, N.**, Yestrebsky, C., and ‡Donnelly, J. Undergraduate Perceptions of Chemistry Learning Spaces. Florida Undergraduate Research Conference. Virtual Conference, February 26th, 2021.
44. *,!Arcay, B., Ewing, B., **Lapeyrouse, N.**, Yestrebsky, C., and ‡Donnelly, J. Analysis of spatial hierarchy of real and ideal chemistry learning spaces. Florida Undergraduate Research Conference. Virtual Conference, February 27th, 2021.
45. *,!Chiu, B. and ‡**Lapeyrouse, N.** Remote Teaching: Best Practices and Students' Experience. Florida Undergraduate Research Conference. Virtual Conference, February 26th, 2021.
46. *,!Bechard, C. and ‡**Lapeyrouse, N.** Remote Learning: The Impact of Alternative Assessments on Student - Experience in a Fundamental Chemistry 1 Course. Florida Undergraduate Research Conference. Virtual

Conference, February 26th, 2021.
[Started as a Lecturer at UCF]

47. *,!Eugster, A., ‡Donnelly, J., Yestrebsky, C., and **Lapeyrouse, N.** Comparison of the performance of General Chemistry 2 students based on General Chemistry 1 track taken. American Chemical Society National Meeting and Exposition. Orlando, FL. March 31st -April 4th, 2019.
48. **Lapeyrouse, N.** and ‡Yestrebsky, C. Reductive dechlorination of 1,2-dichloroproane by ZVI with vitamin B12. 255th American Chemical Society National Meeting and Exposition. New Orleans, LA. March 18th - March 22nd, 2018.

Media Mentions

1. March 6th, 2023: UCF Today
    - https://www.ucf.edu/news/reducing-the-choice-between-a-textbook-and-your-next-meal/
2. February 23, 2023: Pegasus Innovation Lab Aim High Award
    - https://digitallearning.ucf.edu/ilab/aim-nicole-lapeyrouse/
3. February 4th, 2021: UCF FCTL Champion of Open
    - https://cdl.ucf.edu/nicole-lapeyrouse/

Service

Overview

Service to the University

1. Member of the Knights Empowerment Program (2025-Present). The overall goal of this committee to encourage faculty to implement best practices for students, especially during the first two years of enrollment.
2. Co-Chair of Undergraduate Course Review Committee (2025-Present)
    a. To review all undergraduate course additions, revisions or deletions, and special topics course requests and transmit its recommendations to the dean of the College of Undergraduate Studies (or designee) for approval.
3. Faculty Senate Senator (2023-Present)
    a. The Faculty Senate operates according to the principles of shared governance. The Senate serves as the main communication channel between faculty members and the university's central administration. The Senate constitutes the principal advisory body to the president, provost, and vice president for Academic Affairs.
4. Career Services and Experiential Learning Faculty Advisory Board (2024-Present)
    a. The advisory board is to help guide career readiness programs and employability services. Our goal is to make all UCF students aware of the importance of creating a career action plan, effectively selecting majors, getting valuable hands-on experience while attending UCF, and finding great internships and jobs. Career Services and Experiential Learning will strive to provide programs and services that prepare our students for maximum success post-graduation.
5. UCF Undergraduate Student Scholar Symposium Judge (2021-Present)
6. Curriculum alignment 2020-Present
    a. To synchronize core content and the competencies gained by students taking courses that are transferable within the partner colleges and UCF
7. Undergraduate Course Review Committee Member (2023-2025)
    a. To review all undergraduate course additions, revisions or deletions, and special topics course requests and transmit its recommendations to the dean of the College of Undergraduate Studies (or designee) for approval.
8. 2023-2024 UCF Team member of the Institute on AACU Open Educational Resources.
    a. The Institute on OER provides a year-long, online engagement opportunity for teams from campuses or state systems seeking to actualize an ambitious strategy to broaden campus engagement with and adoption of OER.
9. Member of the General Education Program (GEP) Assessment Task Force (2021 and 2022)
    a. This taskforce will address issues identified by the GEP focus groups, analyze preliminary data, and devise strategies to expand the number of faculty engaged in GEP assessment

Service to the College

1. Served as a member of the TIP committee (2023)
2. Member of the COS DEI Action Team (2022 and 2023). The overall goal of this committee is to develop initiatives to increase diversity and representation at the college level.
3. Participated in meetings with the State University System Labs Taskforce (2021). These meetings kept us informed about what other university systems were adopting during the transition to online labs during COVID.

Service to the department

1. Chair of the Engagement and Retention Committee (2024-Present): This committee aims to develop initiatives to increase engagement and retention in the department.
2. Co-chair of the Undergraduate Curriculum Committee (2021-2025), where we review and provide recommendations on undergraduate policies, instruction, and standards related to the chemistry department.

3. Co-chair of the Undergraduate General Chemistry Committee (2023-Present), this committee aims to synchronize core content and learning objectives across the multiple sections.
4. Member of the Marketing Committee (2021-Present), which aims to increase the visibility of the accomplishments of our Faculty and students and the programs offered by our department.
    - Compiled and edited "Congratulations Spring 21" graduation video for the department
    - Helped facilitate and coordinate the virtual open house for our Chemistry graduate programs to increase the visibility of our department
5. Member of the Undergraduate Curriculum Committee (2021-2025), where we review and provide recommendations on undergraduate policies, instruction, and standards related to the chemistry department.
6. Chair of the Hiring Committee for a new General chemistry lab coordinator position (2024)
7. Chair of the diversity committee (2021-2024). The overall goal of this committee is to develop initiatives to increase diversity and representation in the chemistry department.
8. Chair of the Hiring committee for a new General chemistry lab coordinator position (2024)
9. Served on Hiring committees for a new General Chemistry and Biochemistry lecture search (2023).
10. Mentor numerous faculty to help advise and train them on new technology that can be implemented into their classrooms
    - Meet with faculty to give different resources for recording lecture content and worked out videos
    - Helped them set up their webcourses and organize it
    - Gave tips on using webcourses and other plugins to disseminate information
    - Transition face-to-face labs and discussion sections to successfully operate on an online platform

Service to the community

1. Built strong connections to Orange County Public School Systems by being a Chemistry Faculty Fellow
    - Involved with creating a high school chemistry laboratory manual alongside faculty from Valencia and Seminole State Colleges and OCPS. Focus groups were held with 8 OCPS faculty across the district to identify 4 individuals to work in the summer with writing the lab manual and performing experiments. In writing the lab manual, Faculty identified and agreed on key topic areas that were found to be essential labs in line with state-mandated chemistry standards. I helped facilitate a two-week practice lab session for high school faculty and created a communication channel that individuals involved in this cohort can use to communicate with one another outside of this project timeline. This also laid the foundation to keep in contact with one another in case faculty had additional questions during the school semester. In addition to creating the lab manual, we spent time running through the experiments over the summer at the downtown UCF campus. During this time, I supported high school faculty with performing the experiments and providing insight into the techniques that were being used in those labs.
    - Invited as a Guest Speaker to talk about the Universal Design of Learning and scaffolding techniques
    - Participated as a panelist for OCPS "Ask a Professor", high school faculty were able to ask their questions on how to prepare students to transition to a college or university setting
2. Volunteered with the local American Chemical Society Orlando section at the Science Center (2021 and 2022) and Earth Day at Lake Eola (2021, 2022, and 2023).
    a. National Chemistry Week celebrates the importance of chemistry in everyday life. The local Orlando ACS partners with the Orlando Science Center to host a community event to promote chemistry.
    b. Earth Day: To promote chemistry's positive role in the world, ACS established the Chemists Celebrate Earth Week (CCEW) public awareness campaign. During CCEW, ACS members and chemistry enthusiasts celebrate by coordinating events and communicating the importance of chemistry. The Orlando Local Section and the Florida Local Section participated in the Central Florida Earth Day celebration at Lake Eola. ACS volunteers entertained more than 150 children with activities, including creating chromatography butterflies with coffee filters, water, and marker pens.

Professional service

1. Organized symposiums at national (2022,2022) and regional conferences (2023)
2. Invited to Umea University in Sweden as an invited Speaker and to host workshops (2023)
3. Reviewed articles for journals
    - Chemical Engineering Journal
    - Journal of Chemistry Education
    - Environmental Engineering Science
    - International Journal of Technology in Education and Science
    - Journal of Geoscience Education
4. International Activities Committee Member, Division of Chemical Education (2019-Present)
    - Vision: As the International Activities Committee of the Division of Chemical Education, our aim is to engage and connect with other networks of chemistry educators with global interests. Through these networks, we will exchange ideas about chemistry education research and practices that promote equity and diversity in chemistry education.
5. Local Orlando American Chemical Society: The Orlando Section promotes public awareness of chemistry by being involved in community outreach programs and working with chemistry and science students and teachers. We hope to encourage an interest in the chemical sciences.
    - Chair 2023: The supervision, coordination, and overall direction of section activities are the primary and ongoing functions of the section chair.
        i. The local section was awarded a 2023 ChemLuminary award
        ii. The Orlando Section awarded $1600 for five students to travel to on the following scientific meetings: the spring and fall ACS National Meetings in Indianapolis and San Francisco and the 99th Florida Annual Meeting and Exposition (FAME) conference in Palm Harbor.
        iii. Organized social and outreach events for members, including a summer social, and annual awards banquet, National Chemistry Week, and more.
        iv. Participated in organizing a regional conference, SERMACS 2025, to be hosted by the local ACS Orlando section.
    - Chair-elect 2022: The chair-elect serves as program chair and has the principal responsibility for planning and arranging the section's meeting programs for the year during which he or she will be chair
        i. The local ACS section will be hosting the Southeastern Regional Meeting of the American Chemical Society in 2025. This regional meeting caters to over 1,200 researchers in a wide range of chemistry disciplines. I have been involved with planning the regional meeting and securing the venue.
        ii. Organized social and outreach events for members, including a summer social, and annual awards banquet, National Chemistry Week, and more.
        iii. The local section was awarded a 2022 ChemLuminary award, which honors the best examples of programming, outreach, and operations from ACS local sections, technical divisions, regional meetings, and international chemical sciences chapters.

Examples of videos created for service to the college and department

Department:

1. Congratulations to Spring 2021 graduates: https://www.youtube.com/watch?v=5bFZVGBT8cs
2. UCF Department of chemistry video: https://www.youtube.com/watch?v=h5xLGf0p4s4
3. College: UTA/ULA workshop video: https://ucf-my.sharepoint.com/:v:/g/personal/ni621638_ucf_edu/EYkWVs-_RapDiH_E7D8RDNQBVDlQ3Zqu89b633c2MRFufw?email=Teresa.Dorman%40ucf.edu&e=5Slxeh

Professional development

Summary

Throughout my professional career, I have strived to create an engaging learning environment for students and to increase student performance in STEM-based courses. I have participated in professional development workshops and programs to improve my teaching and course structure. In addition, my goal is to create a more diverse, equitable, inclusive, and accessible learning environment for my students. The skills I have gained from these experiences have benefited my students and helped the Chemistry Department and the College of Sciences. I have incorporated skills and resources gained from these programs as the chair of the Chemistry Department Diversity, Equity, and Inclusivity (DEI) committee and as a member of the DEI Action Task Force for the College of Sciences.

Workshops and Programs

1. I attended the 2025 Southeast and Southwest Meeting of the American Chemical Society conference. I attended symposiums related to chemistry education.
2. Attended monthly meetings (2025) and/or reviewed the appropriate materials from the national organization from which this program stems (Student Experience Project). These meetings discussed a wide range of techniques to incorporate into your courses to help increase students' sense of belonging and how to organize the program. Meetings have been held every month since May. May 6th, June 9th, July 9th, August 6th, August 12th, September 11th, October 21st, and December 16th.
3. I attended the 2025 UCF Digital learning Day conference, which has an emphasis on exploring pioneering ways to positively impact students and the quality of the learning experience in all course modalities
4. I attended the 2024 UCF AI Day conference, which focused on AI and its applications. There were breakout sessions for beginners and more advanced ones as well. AI Day occurs each semester.
5. I attended the 2024 UCF Digital learning Day conference, which has an emphasis on exploring pioneering ways to positively impact students and the quality of the learning experience in all course modalities
6. I attended the 2024 Biennial Conference on Chemical Education (BCCE), which is a national meeting sponsored by the Division of Chemical Education (DivCHED) of the American Chemical Society (ACS). The conference is designed for those who teach chemistry at all levels: K-12, secondary school science teachers, undergraduate students, graduate students and post-secondary chemistry faculty.
7. Participated in the AACU Institute for open education and attended monthly meetings and seminars related to instituting Open education at a university (2023-2024).
8. Attended Southeastern Regional Meeting of the American Chemical Society, October 25th – 28th, 2023. I attended symposiums related to chemistry education.
9. American Chemical Society Leadership Institute May 20-22, 2022
    - The Leadership Institute is an annual invitation-only conference where ACS leaders come together to learn both management and leadership skills to enable them to be successful leaders within the American Chemical Society. ACS Leadership Institute promotes ongoing learning, development, and training for ACS volunteer leaders throughout the year.
10. Inclusive Communication 2022
    - Inclusive Communication explores the concept that as we interact in diverse environments and strive to enhance inclusion and equity, it is important to be welcoming, appreciative, valuing, and respectful in our communications with one another.
        - **Outcome**
            - Provided additional resources for my committees to the department and college for DEI efforts
            - Results from this project were presented by undergraduate students Morgan Brackett, Catalina Lopez-Castilla, and Barbara Chiu pertaining to the information gained from this workshop at multiple conferences pertaining to DEI in STEM
11. ABCS of Diversity 2021 and 2022
    - Human diversity impacts each of us on a daily basis. Gaining an understanding of differences and similarities is essential for effective functioning in today's work environment. This workshop

focuses on how stereotypes and biases can get in the way when creating a diverse and inclusive space for all employees.
    - **Outcome**
        - Provided additional resources for my committees to the department and college for DEI efforts
        - Results from this project were presented by undergraduate students Morgan Brackett, Catalina Lopez-Castilla, and Barbara Chiu pertaining to the information gained from this workshop at multiple conferences pertaining to DEI in STEM
12. Understanding Power and Privilege 2022
    - This workshop introduces the constructs of power, privilege, oppression, internalized oppression, and intersectionality and explores their implications for the individual and society.
        - **Outcome**
            - Provided additional resources for my committees to the department and college for DEI efforts
13. Short Courses for geology 2021
    - Geophysics For Bedrock and Formation Mapping
    - Age-Depth Modeling of Sedimentary Deposits
    - NASA Data Made Easy- Synthetic Aperture Radar
    - Introduction to Seismic Structural Interpretation
    - Forensic Geochemistry
        - **Outcome**
            - Incorporated new techniques and information learned from these short courses into GLY1030
            - Received High Quality Review for this course
14. Women Faculty Mentoring Community 2020
    - This mentoring community helped me establish a campus-wide network and gained valuable insight to being a UCF faculty member
15. Course Innovation Project (CIP): Fall 2020
    - This project focused on creative exercises and evaluated if students are linking old concepts when introduced to new topics for an online fundamental's chemistry course.
        - **Outcome**
            - Results from this project were presented by undergraduate student Cameron Bechard
            - Helped create a more engaging learning environment for students and implement similar exercises in my other courses
16. Teaching & Learning Day (TLD): Academic Dishonesty in Online Environments 06/12/2020
    - This workshop focused on the challenges of remote teaching and how to design assessments to discourage students from engaging in academic dishonesty. Topics covered were: designing assignments that make cheating difficult, preventing and detecting plagiarism, Canvas tools for minimizing cheating, Proctor Hub, and Respondus Lockdown Browser.
        - **Outcome**
            - Helped design assessment tools that decreased academic dishonesty in online courses
            - Gained new knowledge that was used to design GLY1030 that received quality and high-quality review for online courses
17. 2020 Summer Faculty Workshop
    - During this workshop I created interactive and novel multimedia videos to engage students in GLY1030. Videos were constructed for each major topic in this introductory course and incorporated real world examples. In addition, assignments were curated to increase student interactions with the course material.
        - **Outcome**

- Gained new knowledge that was used to design GLY1030, which received a quality and high-quality review for online courses
- Results from this project were presented by undergraduate student Barbara Chiu and pertained to the resources developed in this workshop at multiple conferences and published her work. She currently has another paper under review and is about to submit another paper for publication on this work
- Results were presented at conferences regarding the work pertaining to this project by myself at multiple conferences and as an invited speaker

18. OER Bootcamp 2020
    - This short course provided resources to continue improving affordability and accessibility of GEP course materials by working with targeted teams of faculty within Chemistry
        - **Outcome**
            - Received AIM high award and recognition in 2021 and 2022
            - Recognized as a Champion of Open (https://cdl.ucf.edu/nicole-lapeyrouse/)
            - Accepted proposal from CDL iLab for a Course Redesign Initiative
                - This proposal looked at developing a free open textbook, homework modules, and provide student access to their course materials indefinitely.

Awards and recognition received because of Professional Development workshops and programs:

- Online Learning Consortium for Excellence in Instructional and Teaching Practice - 2024
- AIM High 2021 - 2024
- Honorable Mention for AIM High Individual Impact Award 2022
- Quality Review for Online Course 2021
- Champion of Open 2021
- High-Quality Review 2021