# Jeffrey F. Glusman

*Assistant Teaching Professor*
*Ann and H.J. Smead Aerospace Engineering Sciences*
*University of Colorado, Boulder*

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## Education

2017–2022 **Ph.D. Mechanical Engineering**, *University of Colorado Boulder*, Boulder, Colorado.
Thesis title: *Development of Reduced Chemical Models for Simulations of Biomass Pyrolysis and Combustion*
Co-Advisors: Dr. John W. Daily and Dr. Peter E. Hamlington

2014–2016 **M.S. Aeronautics and Astronautics**, *University of Washington*, Seattle, Washington.
Thesis title: *Theoretical Performance Model and Initial Experimentation of a Baffled-Tube Ram Accelerator*
Advisor: Dr. Carl Knowlen

2009–2013 **B.S. Mechanical Engineering**, *The Pennsylvania State University*, State College, Pennsylvania.

## Honors

2024 Outstanding Undergraduate Teaching & Mentoring Award **Recipient** – Ann and H.J. Smead Aerospace Engineering Sciences, University of Colorado Boulder

2022 Graduate Part-Time Instructor Teaching Excellence Award **Nominee** – Graduate and Professional Student Government, University of Colorado Boulder

2021 John and Mercedes Peebles Innovation in Education Award **Recipient**– College of Engineering and Applied Science, University of Colorado Boulder

2016 AIAA Best Paper **Recipient** by the ASME Propulsion Committee for AIAA 2016-4813 *Experimental Investigation of a Baffled-Tube Ram Accelerator*

2016 Excellence in Teaching Award **Nominee** for Graduate Teaching Assistants – College of Engineering (Center for Teaching and Learning), University of Washington

## Professional Experience

2022-current **Assistant Teaching Professor**, *Ann and H.J. Smead Aerospace Engineering Sciences*, University of Colorado Boulder, Boulder, CO.

2017-2022 **Graduate Research/Teaching Assistant/Graduate Part-Time Instructor (GPTI)**, *Paul M. Rady Department of Mechanical Engineering*, University of Colorado Boulder, Boulder, CO.
Turbulent Energy Systems Laboratory (TESLa) & TA for Methods of Engineering Analysis
**GPTI**: Fall 2019, 2020 (MCEN3012: Thermodynamics I), Spring 2022 (MCEN6001: Reacting Flows)

2016-2017 **Adjunct Faculty**, *Bellevue College*, Bellevue, WA.
Statics, Mechanics of Materials, Thermodynamics I, Pre-Calculus I

2016 **Adjunct Faculty**, *North Seattle College*, Seattle, WA.
Pre-Calculus I

2014-2016 **Graduate Research/Teaching Assistant**, *William E. Boeing Department of Aeronautics & Astronautics*, University of Washington, Seattle, WA.
Ram Accelerator Laboratory & TA for Thermodynamics I

## Teaching Experience

### Undergraduate Courses, Assistant Teaching Professor

Fall 2024 **ASEN2012: Numerical and Computational Methods in AES**, *University of Colorado*, Boulder, CO.
300 students, on-going

Fall 2024 **ASEN4018: Senior Projects 1: Design Synthesis - Project Advisory Board**, *University of Colorado*, Boulder, CO.
3 teams, 36 students, on-going

Spring 2024 **ASEN2012: Numerical and Computational Methods in AES**, *University of Colorado*, Boulder, CO.
58 students, Average Instructor Rating: 3.86/5.00 Average Course Rating: 3.88/5.00

Spring 2024 **ASEN2702: Introduction to Thermodynamics and Aerodynamics**, *University of Colorado*, Boulder, CO.
72 students, Average Instructor Rating: 3.94/5.00 Average Course Rating: 3.70/5.00

Spring 2024 **ASEN3802: Aerospace Sciences Lab II**, *University of Colorado*, Boulder, CO.
127 students, Average Instructor Rating: 4.47/5.00 Average Course Rating 4.21/5.00

Fall 2023 **ASEN2012: Numerical and Computational Methods in AES**, *University of Colorado*, Boulder, CO.
256 students, Average Instructor Rating: 3.95/5.00 Average Course Rating: 3.80/5.00

Fall 2023 **ASEN3802: Aerospace Sciences Lab II**, *University of Colorado*, Boulder, CO.
150 students, Average Instructor Rating: 4.22/5.00 Average Course Rating: 4.61/5.00

Summer 2023 **ASEN1022: Material Science for AES**, *University of Colorado*, Boulder, CO.
35 students, Average Instructor Rating: 4.47/5.00 Average Course Rating: 4.22/5.00

Spring 2023 **ASEN1022: Material Science for AES**, *University of Colorado*, Boulder, CO.
259 students, Average Instructor Rating: 4.23/5.00 Average Course Rating: 3.95/5.00

Spring 2023 **ASEN3113: Thermodynamics and Heat Transfer Lab**, *University of Colorado*, Boulder, CO.
125 students, Average Instructor Rating: 4.09/5.00 Average Course Rating: 4.26/5.00

Fall 2022 **ASEN2012: Numerical and Computational Methods in AES**, *University of Colorado*, Boulder, CO.
163 students, Average Instructor Rating: 3.60/5.00 Average Course Rating: 3.53/5.00

Fall 2022 **GEEN1400: First-year Engineering Projects**, *University of Colorado*, Boulder, CO.
30 students, Average Instructor Rating: 4.46/5.00 Average Course Rating: 4.45/5.00

### Undergraduate Courses, Graduate Part-Time Instructor

Fall 2020 **MCEN3012: Thermodynamics I**, *University of Colorado*, Boulder, CO, Remote Section.
89 students, Average Instructor Rating: 4.56/5.00 Average Course Rating: 4.28/5.00

Fall 2019 **MCEN3012: Thermodynamics I**, *University of Colorado*, Boulder, CO.
90 students, Instructor Rating: 5.74/6.00 Course Rating: 5.53/6.00

### Undergraduate Courses, Adjunct Faculty

Spring 2017 **ENGR&214: Statics**, *Bellevue College*, Bellevue, WA.
27 students, Instructor Rating: 3.48/4.00 Course Rating: 3.52/4.00

Spring 2017 **ENGR&224: Thermodynamics**, *Bellevue College*, Bellevue, WA.
25 students, Instructor Rating: 4.00/4.00 Course Rating: 3.95/4.00

Winter 2017 **ENGR&214: Statics**, *Bellevue College*, Bellevue, WA.
42 students, Instructor Rating: 3.44/4.00 Course Rating: 3.54/4.00

Winter 2017 **ENGR&225: Mechanics of Materials**, *Bellevue College*, Bellevue, WA.
25 students, Instructor Rating: 3.64/4.00 Course Rating: 3.64/4.00

Winter 2017 **MATH&141: Pre-Calculus I**, *Bellevue College*, Bellevue, WA.
34 students, Instructor Rating: 3.18/4.00 Course Rating: 3.19/4.00

Fall 2017 **ENGR&214: Statics**, *Bellevue College*, Bellevue, WA.
49 students, Instructor Rating: 3.34/4.00 Course Rating: 3.32/4.00

Fall 2017 **ENGR&225: Mechanics of Materials**, *Bellevue College*, Bellevue, WA.
12 students, Instructor Rating: 2.56/4.00 Course Rating: 3.00/4.00

Fall 2017 **MATH&141: Pre-Calculus I**, *North Seattle College*, Seattle, WA.
36 students, Ratings unavailable

### Graduate Courses, Graduate Part-Time Instructor

Spring 2022 **MCEN6001: Reacting Flows**, *University of Colorado*, Boulder, CO, Hybrid Section.
18 students, Average Instructor Rating: 4.31/5.00 Average Course Rating: 4.15/5.00

## Department Service & Leadership

2024-2025 AY **Lead**, ASEN2402: Thermodynamics Development.

2024-2025 AY **Member**, Undergraduate Committee for Curriculum, Undergraduate Committee for Operation.

2023-2024 AY **Member**, Inclusive Culture Committee, Undergraduate Committee for Operation.

2022-2023 AY **Member**, Undergraduate Committee for Operation.

## Research Interests

Engineering education, computational combustion, reacting flows, and compressible flows.

## Conference, Symposium and Seminar Participation

2023 **Participant**, American Society of Engineering Education National Meeting.
June 24-29, Baltimore, MD

2021 **Participant**, Be the Change Inclusive Pedagogy Seminar Series, Hosted by the Center for Teaching & Learning.
January 22, February 19, March 19, Boulder, CO

2020 **Committee & Presenter**, *Air Quality*, Graduate Engineering Annual Research & Recruitment Symposium.
February 19-21, Boulder, CO

2019 **Committee & Presenter**, *Fire*, Rocky Mountain Fluid Mechanics Research Symposium.
July 29, Boulder, CO

2018 **Committee & Presenter**, *Fire*, Rocky Mountain Fluid Mechanics Research Symposium.
August 13-14, Boulder, CO

2016 **Presenter**, *Advanced Propulsion Concepts I*, 52nd AIAA/SAE/ASEE Joint Propulsion Conference.
July 25-27, Salt Lake City, UT

## Publications

Publications are available through via Google Scholar or upon request.

Updated: September 2024