Seth Ian Dillard

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Education

PhD, Mechanical Engineering **May 2011**
Image Based Modeling of Complex Boundaries

Department of Mechanical Engineering Jan 2005 –
The University of Iowa, Iowa City May 2011

BSE, Mechanical Engineering **December 2004**

Department of Mechanical Engineering May 2002 –
The University of Iowa, Iowa City Dec 2004

Kirkwood Community College Aug 2000 –
Cedar Rapids May 2002

Emergency Medical Technician – Paramedic (EMT-P) **June 1996**

Emergency Medical Services Learning Resources Center (EMSLRC) Jan 1996 –
The University of Iowa, Iowa City Jun 1996

Professional & Academic Positions Held

Interim Associate Director of SBME **July 2024 – Present**

School of Biomedical Engineering
Colorado State University, Fort Collins

- Supervise SBME Undergraduate Advisors.
- Manage all undergraduate program SBME activities (with the Director as needed), including strategic planning and development and ABET accreditation.
- Work with the SBME External Advisory Board.
- Assign graduate teaching assistantship awards in conjunction with the Director.
- Members of the SBME Core faculty who are in the College of Engineering are directly responsible to the Associate Director for SBME undergraduate program-related issues and activities.

Associate Professor of Practice **January 2022 – Present**

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Colorado State University, Fort Collins

- Primary instructor – Computational Fluid Dynamics (MECH 478; senior/grad level course; developed and taught fall semester of 2024). Created all course content, including assignments, labs, and 191 pages of hand illustrated lecture notes for the class. Topics include the governing equations of fluid motion in differential and integral forms from Eulerian and Lagrangian viewpoints, mathematical behavior of CFD equations, spatial and temporal discretization, the finite volume method, turbulence models, compressible flow, pulsatile flow, and user-defined functions.
- Primary instructor – Quantitative Systems Physiology (BIOM/MECH 576; senior/grad-level course; taught spring semester of 2024; scheduled to teach during spring semester of 2025). Developed lectures, homework assignments, and a final project assignment. Topics include transport & metabolism, cell membrane potential, the nervous system, the cardiovascular system, the respiratory system, and the renal system, all viewed from an engineering perspective based in quantitative measurement.
- Primary instructor – Cardiovascular Biomechanics (BIOM/MECH 579; senior/grad-level course; developed and taught fall semester of 2023). Created all course content, including assignments, labs, and 530 pages of typed, illustrated lecture notes for the class (in addition to PowerPoint slides, hand-written and drawn notes for students to follow along with).
- Primary instructor – Problem-Based Learning in Biomedical Engineering (BIOM 300; junior-level course; taught spring semesters 2022 – present). Created PowerPoint course content and developed four unique open-ended biomedical engineering problems for students to investigate in small teams. This course strongly emphasizes research strategies, oral and written scientific communication, team collaboration, experimental design & hypothesis testing, and statistical methods.
- Primary instructor – Prosthetics Innovation in Ecuador (BIOM 350; Education Abroad; spring/summer semesters 2023 – 2024). Led six pre-departure meetings to discuss prosthetic fabrication techniques, availability of prostheses in developing regions, and psychological aspects of limb loss and prosthetic acceptance. Served as trip leader during the in-country experience in Quito, Ecuador.
- Primary instructor – Berlin Bridge – Introduction to Mechanical Engineering (MECH 104A; Education Abroad; summer/fall

semesters 2023 – 2024). Led pre-departure classes teaching introductory mechanical engineering principles to incoming freshmen and transfer students. Served as trip leader and course instructor during the in-country experience in Berlin and Dresden, Germany.

- Primary instructor – Introduction to Mechanical Engineering (MECH 103; freshman introductory course; taught fall semester of 2022). Created PowerPoint course content and Excel/MATLAB-based class exercises.
- Primary instructor – Engineering Design III: Finite Element Analysis & Computational Fluid Dynamics (MECH 301A&B; taught MECH 301A from fall 2022 – present, and MECH 301B from spring 2022 – present). Online delivery with in-person office hours. Created assignments, labs, and 300 pages of typed, step-by-step tutorials for the class (in addition to PowerPoint slides and videos for each lecture and lab topic).
- Primary Instructor – Machine Design (MECH 325; taught fall semester of 2022). Created PowerPoint course content and hand calculated/MATLAB-based class exercises. Designed an open-ended class project involving design and material selection for static- and fatigue-loading of a mountain bike bottom bracket assembly.
- Primary Instructor – Engineering Design Practicum (MECH 486A&B – Senior Design sequence; fall semester of 2023).

Associate Professor of Instruction, BME **July 2019 – December 2021**
Lecturer, BME **January 2015 – June 2019**

Department of Biomedical Engineering
The University of Iowa, Iowa City

- Primary instructor & course creator – Cardiovascular Biomechanics (BME 5510; new upper-level undergraduate/lower-level graduate course created in spring of 2017; taught each spring semester 2017 – 2021). Created assignments, labs, and 530 pages of typed, illustrated lecture notes for the class (in addition to PowerPoint slides, hand-written and drawn notes, and, for AY 2020-2021, videos for each lecture topic).
- Primary instructor & course developer – Cardiovascular Fluid Mechanics (BME 5520; upper-level undergraduate/lower-level graduate course taught spring semester of 2015 and each fall semester 2015 – 2021; redesigned to focus on computational project work). Created assignments, 250 pages of typed, illustrated lecture notes, and 320 pages of detailed lab instructions for the class (in addition to PowerPoint slides, hand-written and drawn notes, and, for AY 2020-2021, videos for each lecture topic and lab exercise).

- Co-instructor – BME Senior Design sequence (BME 4910/20 Senior Design I & II, Design Seminar (BME 4010); taught each academic year from 2017-2021). Guided ~25 design teams of 3-5 students each year through project selection, needs scoping, functional requirements analysis, brainstorming strategies, concept development, prototype development, testing and iterative prototype revision, risk assessment, and prior art/IP research, culminating in a day of year-end presentations and prototype demonstrations delivered to the BME Advisory Council, faculty, staff, project mentors, and family members. For AY 2020-2021, shared the work of creating lecture videos with my co-instructor.
- Primary instructor – Mechanics of Deformable Bodies (ENGR 2750; core undergraduate engineering curriculum course, taught spring semesters 2016 – 2018 and 2020). Standard mechanics/strength of materials course introducing stress/strain analyses of beams, shafts, columns, etc. subjected to compressive, tensile, bending, shear, torsional, and temperature loadings; statically indeterminate members; Mohr's circle; shear, moment, and torque diagrams; strain gauge rosettes.
- Co-instructor – Biomaterials & Biomechanics (BME 2500; core undergraduate BME course taught thirteen semesters from fall 2014 – 2021; taught the Cardiovascular Biomechanics module each time). Created 280 pages of typed, illustrated lecture notes for the class (in addition to PowerPoint slides, hand-written and drawn notes, and, for AY 2020-2021, videos for each lecture topic).
- Lab manager – Carver Biomechanics and Mechanobiology Laboratory (CBML). Oversaw installation of heavy lab equipment, fabricated/set up each of the lab stations, and developed the lab website (http://research.engineering.uiowa.edu/cbml/). Provide ongoing support for research projects and teaching lab activities.
- Exemplary student evaluations received each semester.

Adjunct Faculty Instructor, BME **August 2014 – December 2014**

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- Co-Instructor, Biomaterials & Biomechanics (BME 2500). Responsible for teaching the Cardiovascular Biomechanics module of the course.

Adjunct Faculty Instructor, ME **August 2013 – August 2014**

Department of Mechanical Engineering
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- Primary Instructor, Professional Seminar in Mechanical Engineering (ME 3091; Spring 2014). Organized invited weekly seminars presented by members of the engineering industry and academic communities; organized a college-wide "Grabbing the Globe" series seminar presented by an alumnus working as the lead vehicle dynamics engineer for a NASCAR team.
- Primary Lab Instructor, Experimental Engineering (ME 4080; Spring 2014). Taught all (4) laboratory sections, set up and maintained lab equipment and instrumentation, developed the course website (http://user.engineering.uiowa.edu/~expeng/).
- Primary Instructor, Dynamics (ENGR 2710; Fall 2013); Core Engineering curriculum course. Developed lectures and taught all (2) sections, wrote and administered exams, quizzes, and projects.
- Co-Instructor, Energy Systems Design (ME 4080; Fall 2013). Taught one of two sections offered, designed and consulted on final projects in collaboration with the UI Power Plant and Facilities Management Group.
- Exemplary student evaluations received each semester.

IIHR Postdoctoral Research Scholar **January 2011 – May 2014**

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The University of Iowa, Iowa City

- Developed an image-based modeling algorithm, integrated it with the group's level set-based flow solver package, and performed comparative 3D fluid dynamics studies using CT and MR images of intracranial aneurysms.
- Assisted in the development of an undergraduate/graduate solar cooker group focused on delivering concentrated solar power to a thermal storage device designed for cooking after sunset.
- Published in peer-reviewed journals and presented research work at national and international conferences.

Teaching Assistant **August 2003 – January 2011**

Department of Mechanical Engineering
The University of Iowa, Iowa City

Served as an undergraduate teaching assistant for Thermodynamics I (1 semester) and Heat Transfer during junior and senior years, and as a graduate teaching assistant for Heat Transfer (4 semesters) and Energy Systems Design (4 semesters) throughout graduate school.

- Held regular office hours for student assistance and support
- Delivered course lectures as needed
- Designed, created, and maintained course web sites
- Designed class projects
- Graded homework, projects, and examinations
- Maintained records of graded work

Research Assistant **August 2003 – January 2011**

Department of Mechanical Engineering
The University of Iowa, Iowa City

Conducted research work for the University of Iowa Computational Thermofluids Group, under the guidance of Professor HS Udaykumar, starting at the beginning of senior year and continuing through completion of the PhD.

- Wrote Fortran 90 routines for the purposes of biological fluid flow modeling, image denoising and segmentation, and optical flow analysis.
- Performed physical analyses of fluid flow behaviors in the presence of complex geometries.
- Developed a comprehensive level set-based framework to model complex moving boundaries from images and interface them with existing flow solvers.

Engineering Cooperative Intern **May 2003 – August 2003**

The University of Iowa Power Plant
The University of Iowa, Iowa City

- Performed a combined heat & power (CHP) study of the university's Oakdale campus.
- Evaluated wind energy feasibility for the university's Oakdale campus.

- Developed a graphical interface for the power plant's PI data acquisition and archiving software (still in use at the present time).

Paramedic Specialist **August 1997 – June 2003**

Johnson County Ambulance Service, Iowa City

- Acted as team leader and primary care attendant during emergency 911 responses.
- Provided advanced critical care treatment in a wide variety of medical and traumatic emergencies in the field, including rapid assessment, endotracheal intubation and other airway stabilization, cardiopulmonary resuscitation and defibrillation/pacemaking, intravenous fluid and drug therapy, and fracture stabilization.
- Routinely utilized efficient critical thinking capabilities during physically and emotionally taxing situations under extreme time constraints.
- Coordinated efforts with care providers at all levels of treatment to maximize patient benefit.
- Documented and communicated details pertinent to each service call via medical records and radio reports.
- Maintained National Registry of Emergency Medical Technicians - Paramedic (NREMT-P), Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Advanced Trauma Life Support (ATLS), Neonatal Resuscitation Program (NRP), and CPR instructor certifications throughout career.
- Maintained a positive and educational relationship with the community.

Awards

Art Corey Outstanding International Contributions Award (Nomination) — **Nominated Fall 2023**

Colorado State University

Award for Excellence in Teaching and Dedication to Student Success (4x) — **Fall 2016, Spring 2017, Fall 2017, Spring 2019**

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College of Engineering Faculty Excellence Award for Teaching — **Spring 2020**

"Presented to a faculty member in the College of Engineering whose activities and accomplishments demonstrate unusually significant and meritorious achievement in teaching during the previous three academic years."

https://www.engineering.uiowa.edu/college/faculty-and-staff/college-engineering-awards#Teaching

College of Engineering
The University of Iowa, Iowa City

Service

Department of Mechanical Engineering
Colorado State University, Fort Collins

"BIO-X" Creation Committee	**November 2024 – Present**
CIVE Grade Appeal Committee Chair	**September 2024**
Common First Year Hiring Committee	**August 2024 – Present**
BME Task Force	**Summer 2024**

Promotional Review Committee – Dr. Ryan Maresh	**Summer 2024**
College of Engineering Executive Committee	**July 2024 – Present**
MECH Scholarship Selection Committee	**July 2024 – Present**
Faculty Mentor: James Tillotson	**November 2024 – Present**
Faculty Mentor: Ben Grier	**March 2024 – Present**
TTF Biomaterials Search Committee	**Spring 2024**
Faculty Mentor: Sing-Wan Wong	**August 2023 – Present**
BIOM Scholarship Selection Committee	**July 2023 – Present**
Faculty Mentor: Doug Fankell	**August 2022 – Present**
MECH Biomedical Working Group (Lead during fall semester 2024)	**January 2022 – Present**
MECH Mechanics Working Group	**January 2022 – Present**
MECH Senior Design Team Faculty Adviser	**January 2022 – May 2024**
MECH Undergraduate TA Allocation	**October 2022 – Present**
MECH Career Line Promotion Committee	**August 2022 – Present**
MECH Code & Accreditation Committee (Chair)	**August 2022 – January 2023**

CSU Flight Simulator Club Faculty Advisor	**September 2022 – Present**

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BMESS Student Organization Faculty Advisor	**August 2019 – December 2021**
Undergraduate student advising (~30 students per semester)	**January 2015 – December 2021**
Ad-Hoc Undergraduate Enrollment Committee	**October 2015 – August 2016**
Teaching Labs & Equipment Subcommittee	**September 2015 – December 2021**
BME Undergraduate Committee	**January 2015 – December 2021**

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College of Engineering Teaching Committee (Chair from January 2021 – December 2021)	**January 2020 – December 2021**

Publications

Nakagawa D, Nagahama Y, Policeni B, Raghavan ML, **Dillard S**, Schumacher A, Sarathy S, Dlouhy BJ, Wilson S, Allan L, Woo HH, Huston J, Cloft H, Wintermark M, Torner J, Brown R, Hasan D (2018). Accuracy of Detecting Enlargement of Phantom Aneurysms Using Different Clinically Available MRI Imaging Modalities and Measurement Protocols. *Journal of Neurosurgery*, 130 (2): 559-565.

Dillard SI, Buchholz JHJ, & Udaykumar HS (2016). From Video to Computation of Biological Fluid-Structure Interaction Problems. *Theoretical and Computational Fluid Dynamics*, 30 (1-2): 41-66.

Dillard SI, Mousel JA, Shrestha L, Raghavan ML, & Vigmostad SC (2014). From Medical Images to Flow Computations Without User‐Generated Meshes. *International Journal for Numerical Methods in Biomedical Engineering*, 30 (10): 1057-1083.

Dillard S, Buchholz JHJ, Vigmostad S, Kim H, & Udaykumar HS (2014). Techniques to Derive Geometries for Image-Based Eulerian Computations. *Engineering Computations*, 31 (3): 530-556.

Dillard S, Krishnan S, & Udaykumar HS (2007). Mechanics of Flow and Mixing at the Antroduodenal Junction. *World Journal of Gastroenterology*. 13 (9): 1365-1371.

Conferences

Dillard SI, Mousel JA, Shrestha L, Raghavan ML, & Vigmostad SC (2013). Image Based Flow Computations Without User Generated Meshes. *ASME 2013 Summer Bioengineering Conference*, pp. V01AT13A006-V01AT13A006. American Society of Mechanical Engineers.

Dillard SI, Udaykumar HS, & Buchholz JHJ (2012). Image Based Modeling of Biotransport Through Complex Moving Geometries. *ASME 2012 Summer Bioengineering Conference*, pp. 619-620. American Society of Mechanical Engineers.

Dillard S, Buchholz JHJ, & Udaykumar HS (2011). Image-Based Modeling of Complex Moving Boundaries for CFD Simulation. *20th AIAA Computational Fluid Dynamics Conference*. American Institute of Aeronautics and Astronautics.

Dillard S, Buchholz JHJ, & Udaykumar HS (2010). Optical Flow-Based Modeling and Velocimetry. *63rd Annual Meeting of the Division of Fluid Dynamics*. American Physical Society.

Dillard S, Mousel J, Buchholz JHJ, & Udaykumar HS (2009). Image-Based Flow Modeling. *62nd Annual Meeting of the Division of Fluid Dynamics*. American Physical Society.

Udaykumar HS, Krishnan S, **Dillard S**, Marshall JS, Schulze K (2006). Computation of Peristaltic Transport and Mixing in the Small Intestine. *5th World Congress of Biomechanics, Munich*.

Dillard S (2005). Insights Into Efficient Laminar Mixing from Studies on the Gastrointestinal Tract. *58th Annual Meeting of the Division of Fluid Dynamics*. American Physical Society.

Peer Review

International Journal for Numerical Methods in Biomedical Engineering

ASME Journal of Biomechanical Engineering

IEEE Transactions on Biomedical Engineering

ASME International Mechanical Engineering Congress & Exposition

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Students Supervised

Department of Mechanical Engineering
Colorado State University, Fort Collins

Jacqueline Linn, PhD Committee	**July 2024 – Present**
Addison Lambert, Honors Thesis Committee	**May 2024 – Present**
Emily Brightbill, MS Thesis Committee	**April 2024 – Present**
Madeline Hoffman, Honors Option Supervisor	**November 2023 – Present**
Makenna McVay, Honors Option Supervisor	**November 2023 – Present**
Joyce Bohn, Honors Option Supervisor	**January 2022 – May 2022**
Addison Lambert, Honors Option Supervisor	**January 2022 – May 2023**

Chloe Breckhus, Honors Option Supervisor	**January 2022 – May 2022**
Sam Burke, Honors Project Supervisor	**September 2022 – May 2023**
EmmaKate Raisley, Honors Option Supervisor	**January 2022 – May 2022**
Alex Yung, Honors Project Committee	**September 2022 – May 2023**

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Jennifer Mount, MS Thesis Committee	**January 2021 – May 2021**
Molly Corlett, MS Thesis Committee	**January 2021 – May 2021**
Didier Gossiho, MS Thesis Committee	**January 2021 – May 2021**
Leah VanDenBosch, MS Thesis Committee	**March 2018 – May 2018**
Jackie Engelbart, BS Honors Thesis Supervisor	**August 2013 – May 2014**

Teaching Assignments

Department of Mechanical Engineering
Colorado State University, Fort Collins

Quantitative Systems Physiology (BIOM/MECH 576)	**Spring 2025**
Problem-Based Learning in Biomedical Engineering (BIOM 300)	
Engineering Design III: Finite Element Analysis (MECH 301A)	
Computational Fluid Dynamics (MECH 478)	**Fall 2024**
Engineering Design III: Finite Element Analysis (MECH 301A)	
Engineering Design III: Computational Fluid Dynamics (MECH 301B)	
Berlin Bridge – Introduction to Mechanical Engineering (MECH 104A)	**Summer/Fall 2024**
Prosthetics Innovation in Ecuador (BIOM 350)	**Spring/Summer 2024**
Quantitative Systems Physiology (BIOM/MECH 576)	**Spring 2024**
Problem-Based Learning in Biomedical Engineering (BIOM 300)	
Engineering Design III: Finite Element Analysis (MECH 301A)	
Engineering Design III: Computational Fluid Dynamics (MECH 301B)	

Cardiovascular Biomechanics (BIOM/MECH 579)	**Fall 2023**
Engineering Design III: Finite Element Analysis (MECH 301A)	
Engineering Design III: Computational Fluid Dynamics (MECH 301B)	
Berlin Bridge – Introduction to Mechanical Engineering (MECH 104A)	**Summer/Fall 2023**
Prosthetics Innovation in Ecuador (BIOM 350)	**Spring/Summer 2023**
Engineering Design Practicum I (MECH 486A)	**Spring 2023**
Problem-Based Learning in Biomedical Engineering (BIOM 300)	
Engineering Design III: Finite Element Analysis (MECH 301A)	
Engineering Design III: Computational Fluid Dynamics (MECH 301B)	
Introduction to Mechanical Engineering (MECH 103)	**Fall 2022**
Engineering Design III: Finite Element Analysis (MECH 301A)	
Engineering Design III: Computational Fluid Dynamics (MECH 301B)	
Machine Design (MECH 325)	

Problem-Based Learning in Biomedical Engineering (BIOM 300) **Spring 2022**

Engineering Design III: Computational Fluid Dynamics (MECH 301B)

Mechatronics (MECH 307) – Covered last 3 weeks of class for primary instructor during parental leave

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Biomaterials & Biomechanics (BME 2500), Cardiovascular Module **Spring 2021**
OCL scores **5.77 / 5.85 / 5.85*

Cardiovascular Biomechanics (BME 5510)
OCL scores **5.82 / 6.00 / 5.82*

BME Design Seminar (BME 4010)
OCL scores **5.44 / 5.30 / 5.20*

BME Senior Design II (BME 4920)
OCL scores **5.54 / 5.33 / 5.58*

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module **Fall 2020**
OCL scores **6.00 / 5.75 / 5.75*

Cardiovascular Fluid Mechanics (BME 5520)
OCL scores **6.00 / 6.00 / 6.00*

BME Senior Design I (BME 4910)
OCL scores **4.67 / 4.64 / 4.86*

Cardiovascular Biomechanics (BME 5510) **Spring 2020**
ACE score **5.90

Mechanics of Deformable Bodies (ENGR 2750)
ACE score **5.63

BME Design Seminar (BME 4010)
ACE score **5.58

BME Senior Design II (BME 4920)
ACE score **5.57

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module **Fall 2019**
ACE score **5.64

Cardiovascular Fluid Mechanics (BME 5520)
ACE score **5.83

BME Senior Design I (BME 4910)
ACE score **5.38

Cardiovascular Biomechanics (BME 5510) **Spring 2019**
ACE score **5.95

BME Design Seminar (BME 4010)
ACE score **5.74

BME Senior Design II (BME 4920)
ACE score **5.78

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module **Fall 2018**
ACE score **5.91

Cardiovascular Fluid Mechanics (BME 5520)
ACE score **6.00

BME Senior Design I (BME 4910)
****ACE score 5.46***

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module **Spring 2018**
*****ACE score 5.88***

Cardiovascular Biomechanics (BME 5510)
*****ACE score 6.00***

Mechanics of Deformable Bodies (ENGR 2750)
*****ACE score 5.81***

BME Senior Design II (BME 4920; Team Instructor)
*****ACE score N/A***

BME Design Seminar (BME 4010; Team Instructor)
*****ACE score N/A***

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module **Fall 2017**
*****ACE score 6.00***

Cardiovascular Fluid Mechanics (BME 5520)
*****ACE score 5.80***

BME Senior Design I (BME 4910; Team Instructor)
*****ACE score N/A***

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module **Spring 2017**
*****ACE score 5.96***

Cardiovascular Biomechanics (BME 5510; New Course)
*****ACE score 5.85***

Mechanics of Deformable Bodies (ENGR 2750)
*****ACE score 5.40***

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module **Fall 2016**
*****ACE score 5.95***

Cardiovascular Fluid Mechanics (BME 5520)

ACE score **5.70

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module — **Spring 2016**
ACE score **5.91

Mechanics of Deformable Bodies (ENGR 2750)
ACE score **5.37

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module — **Fall 2015**
ACE score **5.77

Cardiovascular Fluid Mechanics (BME 5520)
ACE score **5.67

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module — **Spring 2015**
ACE score **5.85

Cardiovascular Fluid Mechanics (BME 5520)
ACE score **5.82

Biomaterials & Biomechanics (BME 2500), Cardiovascular Module — **Fall 2014**
ACE score **5.91

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Experimental Engineering (ME 4080; Lab Instructor) — **Spring 2014**
ACE score **5.96

Dynamics (ENGR 2710) — **Fall 2013**
ACE score **5.79

Energy Systems Design (ME 4048; Co-Instructor)
ACE score **5.51

All listed **OCL (shorthand for Organization/Clarity/Learning Focused) values represent average scores (**6.00** maximum possible rating for each) reported by students in evaluations filled out at the end of each semester. The scored criteria read:*

- *"Organization – The instructor used class time well."*
- *"Clarity – The instructor communicated course material clearly."*
- *"Learning Focused – The instructor's teaching methods helped students learn."*

***All listed **ACE** (Assessing the Classroom Environment) values represent average Teaching Effectiveness scores (**6.00** maximum possible rating) reported by students in evaluations filled out at the end of each semester. The scored criterion reads: "The instructor is effective."*

For both OCL and ACE assessments, scores were assigned as follows: Strongly Agree (6), Agree (5), Slightly Agree (4), Slightly Disagree (3), Disagree (2), Strongly Disagree (1).