Stanford



David Beach

Professor (Teaching) of Mechanical Engineering, Emeritus

CONTACT INFORMATION

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Bio

BIO

Beach teaches courses in the areas of design and manufacturing. Beach and Craig Milroy co-direct the Product Realization Laboratory which provides 1700 students annually with hands on experiences in product definition, conceptual design, detail design, and prototype creation. The PRL offers courses, mentors and tools in support of integrated designing and making. Pedagogically, Beach believes that creation of experience from which students (and teams of students) can interpret and internalize their own conclusions provides an excellent complement to content based teaching. His goal is to add strength in tacit knowledge which derives from the hands-on synthesis of design, prototype building, presentation and criticism.. The resulting judgment and instinct regarding materials, devices, materials transformation processes, and design process complement classical analytical engineering education to create superior engineers.

ACADEMIC APPOINTMENTS

• Emeritus Faculty, Acad Council, Mechanical Engineering

HONORS AND AWARDS

- Gores Award for Excellence in Teaching, Stanford University (1995)
- Bing Undergraduate Teaching Fellow, Stanford University (1997-1999)
- Bass Undergraduate Teaching Fellow, Stanford University (2005-2009)
- Sugden Family University Fellow in Undergraduate Education, Stanford University (2005-2010)
- Dean's Award for Industry Education Innovation, Stanford University (2006)
- Sudgen Family Universith Fellow in Undergraduate Education, Stanford University (2010-2015)

PROFESSIONAL EDUCATION

• MS, Stanford , Engineering (Product Design) (1972)

LINKS

• Product Realization Lab: http://productrealization.stanford.edu/

Teaching

COURSES

2022-23

• Manufacturing Processes and Design: ME 129 (Win)

2021-22

- Design and Manufacturing: ME 203 (Aut, Win)
- Manufacturing Processes and Design: ME 129 (Win)
- Product Realization: Design and Making: ME 103 (Aut, Win)
- The Magic of Materials and Manufacturing: ME 219 (Aut)

2020-21

- Design and Manufacturing: ME 203 (Aut, Spr)
- Manufacturing Processes and Design: ME 129 (Win)
- Precision Engineering: ME 324 (Spr)
- Product Realization: Design and Making: ME 103 (Win)
- The Magic of Materials and Manufacturing: ME 219 (Aut)

STANFORD ADVISEES

Master's Program Advisor

Aidan Fay, Kevin Troy