

The Future of the Automobile - Winter 2011/2012

The concept of this course is to present, discuss, and envision the future of the automobile in terms of sustainability, safety, performance, and enjoyment. Students and invited speakers from academia and industry present their research and share their visions, explain challenges, and offer solutions regarding personal mobility. In addition, open discussion sessions will be scheduled based on the input from students.

The goal of the course is to develop an understanding for the interactions of technology, business, and society with a specific automotive focus and assess technology in a larger context than someone's primary educational background.

Students should have a basic background in engineering, social sciences, business, or law. This background should provide the students with the ability to discuss automotive topics and put them in an interdisciplinary context. It is essential to understand that an automobile, beyond technology, influences and is being influenced by a variety of culture, society, legal, and business aspects.

Instructors	Sven Beiker, Chris Gerdes
Time	Tue, 12:15-1:05PM
Location	Building 550 (Peterson Laboratory), Room 200
Format	Open seminar; guest lectures from industry and academia; students discussing automotive topics based on lectures
Level	Advanced undergrads or beginning grads
Grading	1 unit, S/NC, based on individual input to the course, 70% attendance minimum For satisfactory, students to submit 1 one-page essay that will be used in the seminar discussion (further details will be announced in class).
Schedule	Jan 10 Introduction: Overview of the course, outlook at topics Jan 17 Future Visions for Electric Mobility (Peter Dempster, BMW Group) Jan 24 American Journey 2.0 (TJ Giuli, Ford Motor Company) Jan 31 Autonomous Driving and Human Challenges (lecturer to be announced) Feb 7 Mutual Influence of the Automobile and Urbanization (Joseph Kott, Program On Urban Studies - Stanford University) Feb 14 Open Discussion w/ Students and Instructors Feb 21 Vehicle Electrification (Nancy Gioia, Ford Motor Company) Feb 28 Mobile Devices vs. Mobility Choices (lecturer to be announced) Mar 6 Carsharing as a Trend for Young People? (Angus Davol, Parking & Transportation Services - Stanford University) Mar 13 Summary of the Class <i>(all dates and topics subject to change)</i>
Office Hours	After class and upon request
Contact	Sven Beiker, Bldg 550 / Rm 131, beiker@stanford.edu, 736-1504
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More info: <http://www.stanford.edu/class/me302/opportunities.htm>