

産業・企業研究Ⅲ (Industry and Enterprise ResearchⅢ)

科目ナンバリング MAN-305
選択 2単位

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1. 授業の概要(ねらい)

In this course, global automotive industry will be taken up, focusing on its history, global alliance, major manufacturers and markets and some state-of-the-art technologies. Automotive manufacturers are competing each other in every corner of the world and at the same time, the issues related to safety and environment are crucial burden for them to cope with. Furthermore, C.A.S.E., standing for Connectivity, Autonomous, Sharing and Electricity will surely allow new players outside of this industry like Waymo(Google) and Apple, to join in this competition. What kind of powertrain will be dominant in 2030? Can ICT companies like Waymo(Google) invade successfully in this industry by 2040? Who/what will be driving vehicles in 2050? Let's try to think about the future of automotive industry together.

2. 授業の到達目標

The main objectives of this course are

- ①To understand the current situation of global automotive industry, and
- ②To acquire the ability to forecast its future from various pieces of the information provided with in this course.

3. 成績評価の方法および基準

Performance of the students is graded in the following elements and weightings.

- Attendance (mandatory)
- Class participation/contribution: 15%
- Review tests: 30%
- Mid-term exam.: 20%
- Final exam.: 35%

4. 教科書・参考文献

教科書

Instead of any specific textbook, prints will be distributed in every class. Additionally, any books related to the subject will help students in obtaining necessary information, many of which will be available in various languages at most of book stores.

5. 準備学修の内容

Students are encouraged to review the contents after each class for better understanding and furthermore, to follow the latest information regarding automotive industry by checking daily media. Such review will be tested as appropriate as above-mentioned review tests.

6. その他履修上の注意事項

Participation to the class and aggressive approach to the subject are essential. As is mentioned below, Lesson 1(scheduled on April 13, data available at 9:00 AM on April 11) and Lesson 6(scheduled on May 22, data available at 9:00 AM on May 20) will be through LMS system.

7. 授業内容

- 【第1回】 Introduction (LMS)
- 【第2回】 Automotive history① Invention and mass-production
- 【第3回】 Automotive history② Growth and future issues
* Mini-test will be carried out therefore students are encouraged to do review work over class #1 to #3..
- 【第4回】 Economic impact
- 【第5回】 Global alliance① Major groups and advantage of alliance
- 【第6回】 Global alliance② Case study (LMS)
* Mini-test will be carried out therefore students are encouraged to do review work over class #4 to #6.
- 【第7回】 Toyota
- 【第8回】 Other automotive manufacturers in Japan
* Mid-term exam. will be carried out therefore students are encouraged to do review work over class #1 to #8.
- 【第9回】 Automotive manufacturers in Asia
- 【第10回】 Automotive manufacturers in USA
- 【第11回】 Automotive manufacturers in Europe
* Mini-test will be carried out therefore students are encouraged to do review work over class #9 to #11.
- 【第12回】 Safety and environment① Emission control, fuel consumption and global warming
- 【第13回】 Safety and environment② Seat belt, air-bag and driving assistance
- 【第14回】 New generation vehicles① Various types (HV/EV/PHEV/FCV)
- 【第15回】 New generation vehicles② Strategy of manufacturers
Final exam. will be carried out therefore students are encouraged to do review work over all the classes in this semester.