

イノベーション論Ⅲ (InnovationⅢ)

科目ナンバリング MAN-313
選択必修 2単位

武田 基秀

1. 授業の概要(ねらい)

The students who took the course of Year 2019 later half, can take this course to fit extension of their study for Year 2020.

welcoming Japanese students who challenge to learn and work together for Innovation Study in English.

This course focuses on an introductory study of Innovation, which is a key driver of success for social and economic growth and evolution, as well as today's leading companies. All lectures and workshops are given in English.

It is open to foreign students as a part of Teikyo Asian Exchange Program (TAEP). And also it is welcoming Japanese students who challenge an essential style of studying in global society to learn and work together in English. Possible kind navigations would be provided for students who face some difficulties to fit to unfamiliar style of learning in English.

In this course, first, we study on what is innovation through various cases of innovation in Japan and more those of United States as a center of innovation. Especially those dynamics (history) of how innovations happened and expanded, we prepare a series of video articles on Innovation made in Japan and United States for easy and practical understandings.

Second, we stretch those understandings through workshops using a textbook telling a long history of Innovation.

Third, we prepare our basic knowledges for the following precise study of innovation expected in the next semester's Innovation Course.

2. 授業の到達目標

① to understand what is Innovation, especially its nature and mechanism to happen, diffuse and grow in complex social and economic system.

② to be able to explain dynamic feature of innovation taking a practical case such as Information Technology, Energy, Medical, Money, Biology and Infrastructure field, through learning various cases of Innovation in this course.

③ to be able to explain how you are thanking fruit of innovation in daily life and what is required for future innovation

3. 成績評価の方法および基準

Your course grade is based on the following components:

Mid-term reports and the final report (exam): 40%

Workshops and Discussion/ Participation and Contribution:30%

Class Participation / Your Discipline:30%

4. 教科書・参考文献

教科書

Jared Diamond 『guns, germs and steel/ a short history of everybody for the last 13,000years』
Vintage Books, London

World Economic Forum World Economic Forum 2019 available in the WEF homepage

参考文献

Other Text Materials distributed or put in LMS

Reference Books are as follows:

Isaac Asimov 『A Short History of Chemistry』 Doubleday and Co. Inc. New York

Eric Schmidt and Jonathan Rosenberg 『How Google Works』 Grand Central Publishing

5. 準備学修の内容

to read 『guns, germs and steel』 and others instructed to prepare for workshops,
others to be explained in the lecture of introduction.

6. その他履修上の注意事項

Please follow and review the study using the records of lectures on LMS

7. 授業内容

- 【第1回】 Course Overview
Essential nature of innovation in Complex System of society and economy.
- 【第2回】 Key Elements of Innovation No1
Workshop-1: How a top economist observes on dynamics of growth of nation, organization and individuals.
- 【第3回】 Key Elements of Innovation No2
Workshop-2 How a top scientist and a leading industrialist observe on Innovation.
- 【第4回】 Silicon Valley / the history of the holy land of high-technology
- 【第5回】 Google, Apple and Amazon / leading edge of business in the world
- 【第6回】 Workshop-3: Part-1 and 2 of "Guns, Germs and Steel" by Jared Diamonds
- 【第7回】 DNA/Innovation of Bio-Technology
- 【第8回】 Cancer/Innovation of Medical Field
- 【第9回】 Edison's Miracle of Light / Innovation of Energy
- 【第10回】 Energy and Nuclear Power Generation / nature of technology and engineering
- 【第11回】 -continued-

- 【第12回】 Workshop-4 Part-3 and 4 of “Guns, Germs and Steel” by Jared Diamonds
- 【第13回】 Electric Money / Innovation of Monetary System
- 【第14回】 Overview on Innovation (Intelligence/Energy/Machine/Bio/Money, each fields)
- 【第15回】 Uncertain and complex times/ Changing Principle of Innovation