

## Course Outlines

### ■ 1st Semester, 2020 (Apr. 2020 – Jul. 2020)

Online

Apr. 25th	Program Guidance and Sustainability Research Advanced Practicum I, II and III (1) 10:00-17:00	Academic Literacy		
May 2nd	Foundations of Sustainability Research A (1) 9:00-16:00	@TUFS	@TUAT	@UEC
May 9th	Foundations of Sustainability Research A (2) 9:00-16:00	Apr. 28	May 19	May 13
May 23rd	Foundations of Sustainability Research A (3) 9:00-16:00	May 12	May 26	May 20
Jun. 6th	Foundations of Sustainability Research A (4) 9:00-16:00	Jun. 2	Jun. 16	May 27
Jun. 13th	Foundations of Sustainability Research A (5) 9:00-16:00	Jun. 9	Jun. 30	Jun.17
Jul. 4th	Foundations of Sustainability Research A (6) 9:00-16:00	Jun. 23	Jul. 14	Jul. 1
Jul. 18th	Sustainability Research Advanced Practicum I, II and III(2) 13:00-17:30	Jul. 7	Jul. 21	Jul. 15

## Course Description

### ■ Foundations of Sustainability Research A

The lectures aim to enable students to comprehensively and systematically acquire the basic knowledge needed in the Joint Doctoral Program for Sustainability Research. In particular, the lectures are aimed at cultivating a sense that serves as the foundation of ethical and pluralistic ways of thinking called for in international settings. The students learn about SDGs, global issues, and intellectual properties.

#### Foundations of Sustainability Research A Lecture Schedule

- (1) 5/2: Foundations of Sustainability Research A (1)
  - 09:00-12:00 Takeuchi Shinichi (TUFS): Context and Backgrounds of SDGs
  - 13:00-16:00 Chitose Atsushi (TUAT): Targets and Examples of Sustainability Research
- (2) 5/9: Foundations of Sustainability Research A(2)
  - 09:00-12:00 Chitose Atsushi and Nomura Yoshihiro (TUAT): Human Development, Food, Resources and Energy
  - 13:00-16:00 Iwasaki Minoru (TUFS): Global Public Sphere and International Society
- (3) 5/23: Foundations of Sustainability Research A(3)
  - 09:00-12:00 Nakayama Chikako (TUFS): World-Systems Analysis and SDGs
  - 13:00-16:00 Takada Hideshige (TUAT): Marine Plastic Pollution
  - 16:00-17:30 Interdisciplinary Seminar Workshop(1)
- (4) 6/6: Foundations of Sustainability Research A(4)
  - 09:00-12:00 Eto Manabu (Hitotsubashi Univ.): Standardization and Intellectual Property Rights
  - 13:00-16:00 Yamamoto Kayoko (UEC): Environmental Problems and Disaster Resilience
  - 16:00-17:30 Interdisciplinary Seminar Workshop (2)
- (5) 6/13: Foundations of Sustainability Research A(5)
  - 09:00-12:00 Group Discussion– What is Sustainability Research?
  - 13:00-16:00 Ken Nagasaka: Sustainable Energy Engineering
  - 16:00-17:30 Interdisciplinary Seminar Workshop (3)
- (6) 7/4: Foundations of Sustainability Research A(6)
  - 09:00-16:00 Student Presentations (by 2019 spring students)

## ¶Academic Literacy Seminar provided by TUFFS

Venue : Online

Subject : English Discussion Training Class

Instructor : SUZUKI, Steven Taro

### Summary and goals of the course :

The course is designed to improve presentation skills in academic and professional contexts. In order to achieve this goal, higher-level intellectual skills will be developed and improved through engaging in, and performing various tasks and discussions. A natural by-product will be students improving their analytical, rhetorical, and critical thinking skills. These skills are abstract and difficult to measure; however, they are important in terms of being able to collaborate and cooperate effectively with colleagues, superiors, subordinates, and clients in future professions.

### Overview of the course :

Students will focus on learning important skills for presenting at professional conferences, and also how to adroitly handle Q&A sessions. A short presentation will be conducted by each student in every class. The presentations will start on a basic level, and will increase in analytical and rhetorical difficulty as the course progresses. The course will conclude with a basic full length presentation with a Q & A session performed by each student.

### Schedule : (17:40-19:10 )

1) Tuesday, April 28: Introduction of TUFFS library

\*Professional librarians explain at the TUFFS library how to find domestic and international literatures for academic writings.

2) Tuesday, May 12 Discussion Skill Training in English 1

3) Tuesday, June 2 Discussion Skill Training in English 2

4) Tuesday, June 9 Discussion Skill Training in English 3

5) Tuesday, June 23 Discussion Skill Training in English 4

6) Tuesday, July 7 Discussion Skill Training in English 5

## **TUFS English Learning Center (ELS)**

All JDPSR students are eligible for participating programs offered by TUFS English Learning Center (ELC) to enhance their autonomous English learning. ELC provides four programs: speaking, writing, e-Learning, and English library. To join the speaking and writing session, it needs to make a reservation at the center. For more details, please refer to the leaflet with which they can learn how to use the center.

English Learning Center (ELC):  
Room 304, Research and Lecture Building, TUFS  
Phone: 042-330-5416  
E-mail: tufs-elec@tufs.ac.jp

## **¶Academic Literacy Seminar, provided by TUAT**

Venue : Online

Subject : Basic Statistics

Instructor : CHITOSE, Atsushi

Summary and goals of the course :

The objectives of this course are i) to acquire basic skills of statistical analysis and correct knowledge in dealing with statistics; and ii) to know how to perform basic statistical tests and interpret their results using the Excel worksheets.

Overview of the course :

In each class, students will be given the instruction regarding a special topic by the instructor, followed by the practice for statistical analysis using “Function” and/or “Analysis ToolPak” of Excel.

Note : Please bring your own PC, in which Microsoft Excel has been installed.

Schedule : (17:40-19:10)

- 1) Tuesday, May 19 Descriptive Statistics 1) Univariate case
- 2) Tuesday, Maty 26 Descriptive Statistics 2) Bivariate case
- 3) Tuesday, June 16 Inferential Statistics 1) Statistical distribution, t-test
- 4) Tuesday, June 30 Inferential Statistics 2) Hypothesis testing (t-test, F-test)
- 5) Tuesday, July 14 Inferential Statistics 3) Hypothesis testing among groups (ANOVA)
- 6) Tuesday, July 21 Inferential Statistics 4) Regression Analysis (OLS)

**¶ Academic Literacy Seminar provided by UEC**

Access map: <https://www.uec.ac.jp/eng/about/access/>

**1) Subject : GIS (Geographic Information Systems)**

Venue : Online

Objective : Learn the basic techniques of GIS referring textbook edited by the GIS

Association of Japan. (<http://www.kokon.co.jp/book/b313385.html>)

Schedule : 17:40-19:10

- 1) Wednesday, May 13
- 2) Wednesday, May 20
- 3) Wednesday, May 27

Note : Bring your own PCs

Contact :

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**2) Subject: AI (Artificial Intelligence)**

Venue : Online

Objective: Introduction and some practice of the basic neural networks

Text: Make Your Own Neural Network by Tariq Rashid

Schedule : 17:40-19:10

- 1) Wednesday, June 17
- 2) Wednesday, July 1
- 3) Wednesday, July 15

Note : Bring your own PCs

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