

# **Syllabus**

**for Study**

**in Special Program for Foreign Postgraduate Students  
in Agriculture, Forestry and Fisheries in Asia, Africa  
and the Pan-Pacific Region**

Shikoku International Student Education Consortium

\* [If time schedule or other items are not specified, ask about them to the lecturer after consulting your advising professor.](#)

(\* 開講時期その他の事項が明示されていない場合は、[指導教員に相談したうえで授業担当教員に確認すること。](#))

KOCHI UNIVERSITY

(高知大学)

**Course Subject Title** (授業題目)

Crop physiology

**Course Subject Code** (申請コード)

18B00

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1<sup>st</sup> year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Friday/5<sup>th</sup>

**Professor (Lecturer or Instructor)** (担当教員名)

MIYAZAKI Akira

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Crop science

**Professor (Telephone)** (担当教員電話)

088-864-5123

**Professor (E-Mail)** (担当教員)

miyazaki@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Food crop, Rice, Yield component, Photosynthesis, Nitrogen absorption

**Content and Objective** (授業テーマと目的)

Physiology and function related with yield production in field crops.

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Environmental stress physiology

**Course Subject Code** (申請コード)

18B01

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture/Exercise

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

YAMANE Shinzo

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Tropical vegetable crop science

**Professor (Telephone)** (担当教員電話)

088-864-5206

**Professor (E-Mail)** (担当教員)

yamane@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Vegetable crop, Environmental stress

**Content and Objective** (授業テーマと目的)

Nature of environmental stress on vegetable crop such as chilling, freeze, heat, drought, excess water, and physiology of plant responses and resistance mechanisms.

**Teaching Materials** (教科書・参考書)

Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Advanced forest tree ecophysiology

**Course Subject Code** (申請コード)

18B04

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

ICHIE Tomoaki

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Tree ecophysiology

**Professor (Telephone)** (担当教員電話)

088-864-5149

**Professor (E-Mail)** (担当教員)

ichie@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Flowering, Photosynthesis, Environmental stress, Tree ecophysiology

**Content and Objective** (授業テーマと目的)

Physiological and morphological properties of tropical trees will be described from the view point of environmental adaptation.

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Plant breeding and genetics

**Course Subject Code** (申請コード)

18B07

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Thursday/5th

**Professor (Lecturer or Instructor)** (担当教員名)

MURAI Masayuki

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Plant breeding

**Professor (Telephone)** (担当教員電話)

088-864-5120

**Professor (E-Mail)** (担当教員)

muraim@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Plant breeding, Genetics, Crop, Rice

**Content and Objective** (授業テーマと目的)

Genetical basis and researches in plant breeding for developing rice and other crops.

Seminar style class together with other students.

**Teaching Materials** (教科書・参考書)

Recent journal papers selected by Professor Murai.

**Evaluation of Results** (成績評価の方法)

Reports and performance in the class.

**Course Subject Title** (授業題目)

Tropical ornamental plant science

**Course Subject Code** (申請コード)

18B09

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Wednesday/3rd (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

SHIMASAKI Kazuhiko

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Floriculture

**Professor (Telephone)** (担当教員電話)

088-864-5130

**Professor (E-Mail)** (担当教員)

shim@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Tropical ornamentals, Growth control, Propagation

**Content and Objective** (授業テーマと目的)

Introduction to ornamental plant sciences and explanation on control of plant growth

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Advanced tropical fruit science I

**Course Subject Code** (申請コード)

18B10

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Monday, 2nd

**Professor (Lecturer or Instructor)** (担当教員名)

OGATA Tsuneo

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Pomology and citriculture

**Professor (Telephone)** (担当教員電話)

088-864-5124

**Professor (E-Mail)** (担当教員)

fsogata@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Tropical and subtropical fruit trees, Propagation, Vegetative growth, Pruning and training,  
Juvenility

**Content and Objective** (授業テーマと目的)

Physiological problems associated with tree propagation, vegetative growth and flower formation in  
tropical and subtropical fruit trees.

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Advanced Tropical Fruit Science II

**Course Subject Code** (申請コード)

18B11

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Monday, 2nd

**Professor (Lecturer or Instructor)** (担当教員名)

OGATA Tsuneo

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Pomology and citriculture

**Professor (Telephone)** (担当教員電話)

088-864-5124

**Professor (E-Mail)** (担当教員)

fsogata@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Tropical and subtropical fruit trees, Fertilization and seed formation, Parthenocarpy, Fruit

**Content and Objective** (授業テーマと目的)

Physiological problems associated with fertilization, seed formation and fruit growth in tropical and subtropical fruit trees.

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Advanced food production process engineering

**Course Subject Code** (申請コード)

18B12

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Friday/3rd (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

KAWANO Toshio

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Food production process engineering

**Professor (Telephone)** (担当教員電話)

088-864-5132

**Professor (E-Mail)** (担当教員)

tkawano@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Food production process, Food analysis, Heat and mass transfer, Chemical engineering  
Unit operations

**Content and Objective** (授業テーマと目的)

Advanced study on the food production process, including physical and chemical reaction during the process

**Teaching Materials** (教科書・参考書)

F. P. Incropera, D. P. DE WITT: Fundamentals of Heat and Mass Transfer 3<sup>rd</sup> Ed., John Wiley & Sons Inc.

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Energy engineering in agriculture

**Course Subject Code** (申請コード)

18B13

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

2nd year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Friday/2nd (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

MIYAUCHI Kiyoshi

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Agricultural process engineering

**Professor (Telephone)** (担当教員電話)

088-864-5212

**Professor (E-Mail)** (担当教員)

kmiya@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Energy saving, Energy utilization, Natural energy, Protected horticulture

**Content and Objective** (授業テーマと目的)

Natural energy, a fossil fuel, electric power energy and the biomass required for agricultural production.

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Agricultural meteorology

**Course Subject Code** (申請コード)

18B15

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Not decided

**Day/Period** (時間割)

Not decided

**Professor (Lecturer or Instructor)** (担当教員名)

MORI Makito

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi Univewrsity/Agricultural meteorology

**Professor (Telephone)** (担当教員電話)

088-864-5131

**Professor (E-Mail)** (担当教員)

morimaki@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Agriculture, Global warming, Local climate, Meteorology

**Content and Objective** (授業テーマと目的)

Understanding the microclimate in the agricultural areas and its influences on crops

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Statistical analysis methods in forestry

**Course Subject Code** (申請コード)

18B17

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Friday/2nd (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

SUZUKI Yasushi

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Forest engineering

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088-864-5137

**Professor (E-Mail)** (担当教員)

ysuzuki@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

ANOVA, Design of experiment, Nonparametric method, Regression, Statistical analysis

**Content and Objective** (授業テーマと目的)

Basic statistical methods and advanced statistical methods, including design of experiments and analysis of variance (ANOVA), with practical application examples of these methods on data analysis of forest operation systems.

**Teaching Materials** (教科書・参考書)

Printed synopsis/ Text: Zar, J.H. (1999) Biostatistical analysis, 4th ed. 663 pp, Prentice-Hall Inc., Upper Saddle River, NJ.

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Advanced fish nutrition

**Course Subject Code** (申請コード)

18B18

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

Not decided

**Semester** (履修期間)

Not decided

**Day/Period** (時間割)

Not decided

**Professor (Lecturer or Instructor)** (担当教員名)

MASUMOTO Toshiro

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University

**Professor (Telephone)** (担当教員電話)

088-864-5159

**Professor (E-Mail)** (担当教員)

tosh@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Fish. Nutrition, Feed, Feeding, Physiology

**Content and Objective** (授業テーマと目的)

Recent research topics of nutritional physiology and feeding of fish

**Teaching Materials** (教科書・参考書)

Computer projector/ Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Animal resources technology

**Course Subject Code** (申請コード)

18B21

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

EDASHIGE Keisuke

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University

**Professor (Telephone)** (担当教員電話)

088-864-5195

**Professor (E-Mail)** (担当教員)

keisuke@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Cryopreservation, sperm, oocyte, embryo

**Content and Objective** (授業テーマと目的)

Preservation of gametes and embryos

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Advanced fish biochemistry

**Course Subject Code** (申請コード)

18B23

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

FUKADA Haruhisa

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Fish nutrition

**Professor (Telephone)** (担当教員電話)

088-864-5156

**Professor (E-Mail)** (担当教員)

fukaharu@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Fish, nutrition, Metabolism, Hormone, Growth

**Content and Objective** (授業テーマと目的)

Introduction to fish biochemistry and explanation on nutrient metabolism and growth

**Teaching Materials** (教科書・参考書)

Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Fish virology

**Course Subject Code** (申請コード)

18B25

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

Not decided

**Semester** (履修期間)

Not decided

**Day/Period** (時間割)

Not decided

**Professor (Lecturer or Instructor)** (担当教員名)

OSHIMA Shun-ichirou

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Fish disease, Fish immunology, Virology

**Professor (Telephone)** (担当教員電話)

088-864-5214

**Professor (E-Mail)** (担当教員)

s-oshima@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Fish disease, Fish immunology, Virology, Vaccine

**Content and Objective** (授業テーマと目的)

Understanding the role of RNA or DNA virus genes and their involvement both in viral replication and in the disease process.

**Teaching Materials** (教科書・参考書)

No need

**Evaluation of Results** (成績評価の方法)

Paper test and report

**Course Subject Title** (授業題目)

Fish ecology of the tropics

**Course Subject Code** (申請コード)

18B26

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

Not decided

**Semester** (履修期間)

Not decided

**Day/Period** (時間割)

Not decided

**Professor (Lecturer or Instructor)** (担当教員名)

KINOSHITA Izumi

**Professor (Affiliation/Research field)** (担当教員所属)

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**Professor (Telephone)** (担当教員電話)

088-856-0633

**Professor (E-Mail)** (担当教員)

muhomatu@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Larvae, Juveniles, Early Life history, Reproduction, Breeding, Migration, Diadromous,  
Ontogeny, Estuary, Coral reef

**Content and Objective** (授業テーマと目的)

To understand biodiversity of early Life history and ontogeny of fishes in tropical waters

**Teaching Materials** (教科書・参考書)

Ontogeny and systematics of fishes

**Evaluation of Results** (成績評価の方法)

Presentation and discussion

**Course Subject Title** (授業題目)

Enhancement science for aquaculture

**Course Subject Code** (申請コード)

18B27

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year or 2nd year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

SEKI Shingo

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Fish genetics

**Professor (Telephone)** (担当教員電話)

088-864-5153

**Professor (E-Mail)** (担当教員)

seki@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Genetics, Breeding science, Chromosome manipulation, Molecular markers, Conservation genetics

**Content and Objective** (授業テーマと目的)

Introduction to fish genetics and breeding science with a focus on chromosome manipulation of fish.

**Teaching Materials** (教科書・参考書)

Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Theory of farm support system

**Course Subject Code** (申請コード)

18B29

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Intensive course in the spring term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

MATSUSHIMA Takanori

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Agriculture economics

**Professor (Telephone)** (担当教員電話)

088-864-5126

**Professor (E-Mail)** (担当教員)

takasan@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Farm management, Farm management consultation, Farm management support

**Content and Objective** (授業テーマと目的)

Students consider the state of the agricultural support system of their country through the study about Japanese agricultural support systems.

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Food science and technology

**Course Subject Code** (申請コード)

18B30

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

Not Decided

**Semester** (履修期間)

Not Decided

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

SHIMAMURA Tomoko

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Food science

**Professor (Telephone)** (担当教員電話)

088-864-5193 (SHIMAMURA Tomoko)

**Professor (E-Mail)** (担当教員)

tomokos@kochi-u.ac.jp (SHIMAMURA Tomoko)

**Keyword for the subject** (キーワード)

Food, Heating, Maillard reaction, Reactive oxygen species

**Content and Objective** (授業テーマと目的)

The interaction between components in foods is discussed in relation with food processing and advanced food processing technology.

**Teaching Materials** (教科書・参考書)

Computer projector /Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Post-harvest science and technology of fish

**Course Subject Code** (申請コード)

18B31

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Intensive course in the spring term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

MORIOKA Katsuji

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Aquatic Product Utilization

**Professor (Telephone)** (担当教員電話)

088-864-5160

**Professor (E-Mail)** (担当教員)

morioka@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

aquaculture, chemical composition, fish, meat quality, rigor mortis, texture

**Content and Objective** (授業テーマと目的)

Lecture on the changes in quality during storage of fisheries foods and their preservation methods.

**Teaching Materials** (教科書・参考書)

Computer projector/OHP/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Food resources utilization

**Course Subject Code** (申請コード)

18B32

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

KASHIWAGI Takehiro

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Food science

**Professor (Telephone)** (担当教員電話)

088-864-5184

**Professor (E-Mail)** (担当教員)

tkashi@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Food science, Food chemistry, Food processing, Functional food

**Content and Objective** (授業テーマと目的)

Recent topic researches on the chemical properties of bioresources and the technology of their processing and utilization

**Teaching Materials** (教科書・参考書)

Computer projector/ Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Experimental course in applied chemistry of bioresources

**Course Subject Code** (申請コード)

18B33

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Experiment

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Intensive course in the spring term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

KASHIWAGI Takehiro, SHIMAMURA Tomoko

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Food science

**Professor (Telephone)** (担当教員電話)

088-864-5193 (SHIMAMURA Tomoko)

**Professor (E-Mail)** (担当教員)

tomokos@kochi-u.ac.jp (SHIMAMURA Tomoko)

**Keyword for the subject** (キーワード)

Food analysis, Food science, Food chemistry, Functional food

**Content and Objective** (授業テーマと目的)

Instruction of recent chemical and instrumental analyses of natural products.

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Molecular nutrition

**Course Subject Code** (申請コード)

18B34

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Not decided (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

ASHIUCHI Makoto

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Tropical bioengineering

**Professor (Telephone)** (担当教員電話)

088-864-5215

**Professor (E-Mail)** (担当教員)

ashiuchi@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Molecular biology, Biochemistry, Nutritional chemistry, Food microbiology

**Content and Objective** (授業テーマと目的)

The aim of this lesson is to enrich the knowledge of new nutritional science that flowers with the advance of molecular genetics in human, animals and microorganisms.

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Applied microbiology in extreme environments

**Course Subject Code** (申請コード)

18B35

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Not decided (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

NAGATA Shinji

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Applied Microbiology

**Professor (Telephone)** (担当教員電話)

088-864-5190

**Professor (E-Mail)** (担当教員)

nagashin@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Microbiology, Enzymology, Fermentation, Food production, Applied microbiology

**Content and Objective** (授業テーマと目的)

Characteristics, the application, and the current state of the art regarding the microbes and its enzymes in extreme environments.

**Teaching Materials** (教科書・参考書)

Computer projector/ Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Advanced chemical ecology

**Course Subject Code** (申請コード)

18B36

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

2nd year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Not decided(Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

KIM Chul-Sa

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/

**Professor (Telephone)** (担当教員電話)

088-864-5185

**Professor (E-Mail)** (担当教員)

cs-kim@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Chemical Ecology, Organic Chemistry, Bioactive Substance, Semiochemicals

**Content and Objective** (授業テーマと目的)

Outline of Interaction between the organisms mediated by chemicals

**Teaching Materials** (教科書・参考書)

Computer projector/ Printed synopsis

**Evaluation of Results** (成績評価の方法)

Presentation

**Course Subject Title** (授業題目)

Advanced material chemistry of forest resources

**Course Subject Code** (申請コード)

18B37

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Monday/1st

**Professor (Lecturer or Instructor)** (担当教員名)

ICHIURA Hideaki

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Biomaterial chemistry

**Professor (Telephone)** (担当教員電話)

088-864-5142

**Professor (E-Mail)** (担当教員)

ichirua@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Cellulose, Pulp, Paper

**Content and Objective** (授業テーマと目的)

This lecture is that the science and industrial uses of cellulose produced from forest resources will be introduced.

**Teaching Materials** (教科書・参考書)

Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Advanced instrumental analytical chemistry

**Course Subject Code** (申請コード)

18B38

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture/Exercise

**Year of commencement** (履修開始年次)

1st year or 2nd year

**Semester** (履修期間)

all term

**Day/Period** (時間割)

(Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

TEBAYASHI Shin-ichi

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Bioorganic chemistry

**Professor (Telephone)** (担当教員電話)

088-864-5203

**Professor (E-Mail)** (担当教員)

tebayasi@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

NMR, MS, UV, IR

**Content and Objective** (授業テーマと目的)

The practice of the structure elucidation method of the organo-chemical using ultraviolet-visible spectroscopy, infrared spectroscopy, mass spectroscopy and nuclear-magnetic-resonance spectroscopy.

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Paper test and presentation

**Course Subject Title** (授業題目)

Biofunction of deep seawater

**Course Subject Code** (申請コード)

18B39

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

UEHIGASHI Haruhiko

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi Prefectural Industrial Technology Center / Food processing

**Professor (Telephone)** (担当教員電話)

088-846-1652

**Professor (E-Mail)** (担当教員)

haruhiko\_uehigashi@ken2.pref.kochi.lg.jp

**Keyword for the subject** (キーワード)

Deep seawater, Fermentation, Food, Beer, Sake

**Content and Objective** (授業テーマと目的)

On the effect of the addition of deep seawater on the fermentation of foods : sake, beer, wine, soy sauce and so on. Visiting deep seawater-related companies.

**Teaching Materials** (教科書・参考書)

Computer projector/Printed materials

**Evaluation of Results** (成績評価の方法)

Attendance and submitting reports after the course

**Course Subject Title** (授業題目)

Applied Enzymology

**Course Subject Code** (申請コード)

18B40

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Not decided (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

MURAMATSU Hisashi

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Applied enzymology

**Professor (Telephone)** (担当教員電話)

088-864-5187

**Professor (E-Mail)** (担当教員)

hmura@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Application of enzyme, Screening for enzyme, Structure and mechanism in enzyme, Industrial application

**Content and Objective** (授業テーマと目的)

An overview of the use of enzymes in industrial applications. Includes a background, a discussion of structure and reactivity.

**Teaching Materials** (教科書・参考書)

Computer projector/ Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Molecular Breeding of protein

**Course Subject Code** (申請コード)

18B41

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

OHNISHI Kouhei

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Molecular genetics

**Professor (Telephone)** (担当教員電話)

088-864-5213

**Professor (E-Mail)** (担当教員)

kouheio@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Molecular evolution, Breeding, Disease, Cloning

**Content and Objective** (授業テーマと目的)

Molecular breeding based on evolutionary molecular engineering will be discussed with certain examples, such as improvement of thermostability.

**Teaching Materials** (教科書・参考書)

Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Chemistry of woody material utilization

**Course Subject Code** (申請コード)

18B42

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture/Exercise

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Wednesday/2nd

**Professor (Lecturer or Instructor)** (担当教員名)

OHTANI Yoshito

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Wood chemistry

**Professor (Telephone)** (担当教員電話)

088-864-5143

**Professor (E-Mail)** (担当教員)

ohtani@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Woody components, Forest products, Naturally occurring compounds, Utilization

**Content and Objective** (授業テーマと目的)

Explaining and discussing with some references to deepen the understanding

**Teaching Materials** (教科書・参考書)

Teaching materials

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) during and after the course)

**Course Subject Title** (授業題目)

Applied Biological Chemistry

**Course Subject Code** (申請コード)

18B44

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

ASHIUCHI Makoto

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Applied biochemistry

**Professor (Telephone)** (担当教員電話)

088-864-5144

**Professor (E-Mail)** (担当教員)

ashiuchi@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Proteins, Enzymes, Carbohydrates, Lipids, Nucleotides, Vitamins

**Content and Objective** (授業テーマと目的)

Lecture on basic and applicable aspects of amino acids, proteins, enzymes, carbohydrates, lipids, nucleotides, vitamins and hormones.

**Teaching Materials** (教科書・参考書)

Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Experimental course in applied biological chemistry

**Course Subject Code** (申請コード)

18B45

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Experiment

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Monday/4th

**Professor (Lecturer or Instructor)** (担当教員名)

ASHIUCHI Makoto

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Applied biochemistry

**Professor (Telephone)** (担当教員電話)

088-864-5144

**Professor (E-Mail)** (担当教員)

ashiuchi@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

**Content and Objective** (授業テーマと目的)

Guidance of technical skills in biochemistry, molecular nutrition, and molecular biology

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Advanced soil conservation

**Course Subject Code** (申請コード)

18B46

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

Not decided

**Semester** (履修期間)

Not decided

**Day/Period** (時間割)

Not decided (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

SATO Taiichirow

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/

**Professor (Telephone)** (担当教員電話)

088-864-5170

**Professor (E-Mail)** (担当教員)

satot@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Agricultural engineering, Rural engineering, Soil Improvement, Soil degradation

**Content and Objective** (授業テーマと目的)

Learn application knowledge to use the soil conservation, executing a sustainable agriculture.

**Teaching Materials** (教科書・参考書)

No use the textbook, printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Landslide and sediment discharge control

**Course Subject Code** (申請コード)

18B47

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Not yet fixed. Contact to the lecturer to determine the schedule

**Professor (Lecturer or Instructor)** (担当教員名)

SASAHARA Katsuo

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Sediment Discharge and Erosion Control

**Professor (Telephone)** (担当教員電話)

088-864-5341

**Professor (E-Mail)** (担当教員)

sasahara@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Sediment yield, Rainfall infiltration, Landslide

**Content and Objective** (授業テーマと目的)

To understand the mechanism of sediment yield and discharge from forested slope, and to understand the mechanism of landslide

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report during the course

**Course Subject Title** (授業題目)

Environmental facility engineering

**Course Subject Code** (申請コード)

18B50

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

To be determined (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

MATSUMOTO Shinsuke

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Construction engineering

**Professor (Telephone)** (担当教員電話)

088-864-5169

**Professor (E-Mail)** (担当教員)

mazmoto@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Numerical simulation, Computational mechanics, Agricultural structures, Concrete engineering

**Content and Objective** (授業テーマと目的)

Numerical analysis technique and knowledge for designing agricultural facilities and structures

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Analytical Chemistry of Plant Root Environment

**Course Subject Code** (申請コード)

18B52

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture/Exercise

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

IWASAKI Kozo

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Agro-environmental chemistry, Plant nutrition

**Professor (Telephone)** (担当教員電話)

088-864-5180

**Professor (E-Mail)** (担当教員)

kozo@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Rhizosphere, Nutrients, Heavy metals, Dynamics, Plant uptake

**Content and Objective** (授業テーマと目的)

Basic aspects of nutrient dynamics in rhizosphere soils and nutrient

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Tropical agro-environmental chemistry

**Course Subject Code** (申請コード)

18B54

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Tuesday/1st

**Professor (Lecturer or Instructor)** (担当教員名)

KANG Yumei

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University / Soil environmental science

**Professor (Telephone)** (担当教員電話)

088-864-5182

**Professor (E-Mail)** (担当教員)

kang@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Soil, Water, Plant, Pollution, Heavy metals

**Content and Objective** (授業テーマと目的)

Soil properties and contamination affected by the tropical environment will be described in terms of physicochemical view points.

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Advanced environmental water management engineering

**Course Subject Code** (申請コード)

18B57

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall Term

**Day/Period** (時間割)

Not decided (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

SATO Shushi

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University

**Professor (Telephone)** (担当教員電話)

088-864-5150

**Professor (E-Mail)** (担当教員)

syu@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Water environment, Agricultural hydraulic structures, Performance verification method, Stock management

**Content and Objective** (授業テーマと目的)

Maintenance and Management of method for rural area; water quality management and facilities management for water supplying system

**Teaching Materials** (教科書・参考書)

Printed synopsis and Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Remote sensing

**Course Subject Code** (申請コード)

18B58

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

MATSUOKA Masayuki

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Remote sensing

**Professor (Telephone)** (担当教員電話)

088-864-5166

**Professor (E-Mail)** (担当教員)

msykmtok@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Remote sensing, Satellite, Image processing, Land surface

**Content and Objective** (授業テーマと目的)

The utilization of remote sensing for land application is outlined in connection with the general features of remote sensing such as sensor type, mechanism of observation and characteristics of data.

**Teaching Materials** (教科書・参考書)

Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Introduction of harmful algal blooms (HABs)

**Course Subject Code** (申請コード)

18B59

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Intensive course in the spring term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

ADACHI Masao

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Aquatic environmental science

**Professor (Telephone)** (担当教員電話)

088-864-5216

**Professor (E-Mail)** (担当教員)

madachi@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Harmful algal blooms, red tides, shellfish poisoning, Plankton

**Content and Objective** (授業テーマと目的)

In this lecture, physiology, ecology and molecular biology of phytoplankton HAB(harmfulalgal bloom) species are introduced.

**Teaching Materials** (教科書・参考書)

Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Water environmental engineering

**Course Subject Code** (申請コード)

18B60

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

2nd year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

FUJIWARA Taku

**Professor (Affiliation/Research field)** (担当教員所属)

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**Professor (E-Mail)** (担当教員)

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**Keyword for the subject** (キーワード)

Wastewater reclamation, Resource recovery, Diffuse pollution, Greenhouse gas emission

**Content and Objective** (授業テーマと目的)

Sustainable water management in urban and agricultural areas

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Plant pathology

**Course Subject Code** (申請コード)

18B62

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Thursday/1st

**Professor (Lecturer or Instructor)** (担当教員名)

KIBA Akinori

**Professor (Affiliation/Research field)** (担当教員所属)

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**Professor (E-Mail)** (担当教員)

akiba@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Plant, Pathogen, Interactions, Defense responses

**Content and Objective** (授業テーマと目的)

Introduction to plant-microbe interactions.

**Teaching Materials** (教科書・参考書)

Computer projector/OHP/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Presentation

**Course Subject Title** (授業題目)

Plant bacteriology

**Course Subject Code** (申請コード)

18B63

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Friday/4th

**Professor (Lecturer or Instructor)** (担当教員名)

HIKICHI Yasufumi

**Professor (Affiliation/Research field)** (担当教員所属)

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**Professor (E-Mail)** (担当教員)

yhikichi@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Plant, Pathology, Bacteriology, Plant-microbe interactions

**Content and Objective** (授業テーマと目的)

Pathogenicity mechanism of plant bacteria, especially, gram negative bacteria, such as *Ralstonia solanacearum*, *Burkholderia glumae*, *Pseudomonas cichorii* et al.

**Teaching Materials** (教科書・参考書)

Computer projector

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Structure of forest products industry in Japan

**Course Subject Code** (申請コード)

18B65

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Not decided

**Professor (Lecturer or Instructor)** (担当教員名)

MATSUMOTO Mika

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Kochi University/Forest economics

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088-864-5145

**Professor (E-Mail)** (担当教員)

matsumoto-mika@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Forest resources, Forest economics, environment economics

**Content and Objective** (授業テーマと目的)

Introduction of Japanese forestry and forest economics

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Advanced soil ecology

**Course Subject Code** (申請コード)

18B67

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Monday/1st

**Professor (Lecturer or Instructor)** (担当教員名)

TANAKA Sota

**Professor (Affiliation/Research field)** (担当教員所属)

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088-864-5183

**Professor (E-Mail)** (担当教員)

sotatnk@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Soil science, Soil ecology, Tropical agriculture

**Content and Objective** (授業テーマと目的)

Fundamental soil science and ecology in terms of sustainable agriculture, especially the tropical region.

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Advanced vegetable Science

**Course Subject Code** (申請コード)

18B68

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

NISHIMURA Yasuyo

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/ Vegetable crop science

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088-864-5129

**Professor (E-Mail)** (担当教員)

yasuyo\_nishimura@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Vegetable crop, cultivation environment, plant physiology

**Content and Objective** (授業テーマと目的)

Growth characteristics and environmental involved in the production of vegetable crop. Control of cultivation environment in greenhouse.

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Coastal ecology and conservation

**Course Subject Code** (申請コード)

18B69

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1st year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

IKEJIMA Kou

**Professor (Affiliation/Research field)** (担当教員所属)

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088-864-5175

**Professor (E-Mail)** (担当教員)

ikejima@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Coastal ecosystems, ecology, aquatic resources

**Content and Objective** (授業テーマと目的)

Understanding basics of ecological processes in coastal ecosystems, and issues for conservation and sustainable use of coastal environment and aquatic resources.

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course

**Course Subject Title** (授業題目)

Biotechnology for fisheries products

**Course Subject Code** (申請コード)

18B70

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

2nd year

**Semester** (履修期間)

Fall term

**Day/Period** (時間割)

Intensive course in the fall term (Contact the lecturer to confirm the availability of the course.)

**Professor (Lecturer or Instructor)** (担当教員名)

ADACHI Kohsuke

**Professor (Affiliation/Research field)** (担当教員所属)

Kochi University/Marine Biochemistry and Biotechnology

**Professor (Telephone)** (担当教員電話)

088-864-5155

**Professor (E-Mail)** (担当教員)

kohsukeadachi@kochi-u.ac.jp

**Keyword for the subject** (キーワード)

Fisheries products, deep sea fish, squid, crab and prawn, biotechnology, biochemistry

**Content and Objective** (授業テーマと目的)

Lecture for efficient and novel utilization for marine products using biotechnology

**Teaching Materials** (教科書・参考書)

Computer projector/Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting report after the course

**Course Subject Title** (授業題目)

Environmental anthropology

**Course Subject Code** (申請コード)

18B71

**Credits (Units)** (単位数)

1

**Class Work Type** (授業種別)

Lecture

**Year of commencement** (履修開始年次)

1<sup>st</sup> year

**Semester** (履修期間)

Spring term

**Day/Period** (時間割)

Friday/2<sup>th</sup>

**Professor (Lecturer or Instructor)** (担当教員名)

MASUDA Kazuya

**Professor (Affiliation/Research field)** (担当教員所属)

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**Professor (E-Mail)** (担当教員)

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**Keyword for the subject** (キーワード)

Natural resource usage, Socio-cultural sphere of Agriculture, Commons, Social history of rural life

**Content and Objective** (授業テーマと目的)

Socio-economic transformation of natural resource usage in rural area

**Teaching Materials** (教科書・参考書)

Printed synopsis

**Evaluation of Results** (成績評価の方法)

Submitting paper (report) after the course