

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)

1st year

Semester (履修期間)

Spring term

Day/Period (時間割)

Friday/5th

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)

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)

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 3rd 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

Professor (Telephone) (担当教員電話)

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)

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)

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)

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)

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)

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)

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)

msykmok@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)

Kochi University/ Water and Environmental Engineering

Professor (Telephone) (担当教員電話)

088-864-5163

Professor (E-Mail) (担当教員)

fujiiwarat@kochi-u.ac.jp

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)

Kochi University

Professor (Telephone) (担当教員電話)

088-864-5196

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)

Kochi University/Plant Biotechnology & Biotechnology

Professor (Telephone) (担当教員電話)

088-864-5218

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)

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)

Kochi University / Soil ecology

Professor (Telephone) (担当教員電話)

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

Professor (Telephone) (担当教員電話)

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)

Kochi University/Coastal Ecology and Management

Professor (Telephone) (担当教員電話)

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)

1st year

Semester (履修期間)

Spring term

Day/Period (時間割)

Friday/2th

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

MASUDA Kazuya

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

Kochi University/Environmental anthropology

Professor (Telephone) (担当教員電話)

088-864-6764

Professor (E-Mail) (担当教員)

masudakz@kochi-u.ac.jp

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