# 2025AAP Course Master's Program Guide Special Course from Asia, Africa and the Pacific Rim

Shikoku Education Consortium

# 2025 AAP Course Master's Program Guide

# Shikoku Education Consortium

# Special Course from Asia, Africa and the Pacific Rim

The education of students from Asia, Africa and the Pan-Pacific nations is administered by Shikoku Education Consortium in the Special Course from Asian, African, and the Pacific Rim (hereafter AAP Special Course). The AAP Special Course was developed for international students pursuing a Master's Degree at Graduate School of Agriculture of Kagawa University and Ehime University, or a Master Degree in Integrated Arts and Sciences at Kochi University (Hereafter all programs will be referred to as Master's Degree at Graduate School of Agriculture).

This program aims to cultivate students who have knowledge and technical skill based on advanced research which focuses on environmentally friendly and sustainable agriculture, forestry, fisheries, and agri-food industry. A Master's Degree in Agriculture will be awarded to students that successfully demonstrate an in-depth understanding of course materials and complete a master's thesis.

Students accepted in this course will be assigned to the Graduate School Agriculture Research Course of Kagawa University, Ehime University, and Kochi University. To meet graduation requirements, students are required to complete the following credits:

#### 1) Compulsory subjects:

# •Introductory and developmental subjects

First-year student seminar	1 credit
International agriculture, forestry and fisheries seminar	1 credit
Survival Japanese	1 credit
Summer seminar	2 credits
General agriculture	1 credit
Total	6 credits

# •Research subjects related to planning, presentation and writing

Research planning	1 credit
Research experiment / investigation I	2 credits
Research experiment / investigation II	2 credits
Research experiment / investigation III	2 credits
Research experiment / investigation IV	2 credits
Research presentation I	1 credit
Research presentation II	1 credit
Thesis writing	1 credit
Total	12 credits

# •Special seminar subjects

Special seminar on bioresource management I	1 credit
Special seminar on bioresource management II	1 credit
Special seminar on bioresource management III	1 credit
Special seminar on bioresource management IV	1 credit
Total	4 credits

# 2) Elective subjects:

Students are required to take 6 subjects, for a total of 6 credits, as elective subjects from the specialized subjects. Furthermore, students are required to take 1 practical subject, for 2 credits, of the 3 offered practical subjects (Field study, Studies on Japanese culture/Community exchange, Internship). Students select subjects from approved subjects for the AAP Special Course (Please refer pp.8-26) after consulting with their academic supervisor and academic advisor. If students have the approval of their academic supervisor, students may be able to select specialized courses not listed in AAP Special Course offerings. This provision is subject to the approval of the respective University Faculty.

# Students must complete a total of 30 credits with a passing grade to be eligible for graduation.

Subjects will be marked on the following scale:

S: 90% and above

A: 80-89%

B: 70-79%

C: 60-69%

D: 59% and below

S, A, B, and C are judged as passing grades. Specific requirements for the submission of the master's thesis are determined by the respective university. The master's thesis must be approved by the academic supervisor prior to submission to the Dean of the Graduate School of Agriculture. All regulations and rules, except those related to the course curriculum and completion requirements for the AAP Special Course, shall be determined by the respective university's graduate school agriculture research course.

	Subjects sect	Credits(単位)	
	Introductory and developme	6 credits	
subjects Research subjects		Research subjects related to planning, presentation and writing	12 credits
		Special seminar subjects	4 credits
Elective	Specialized subjects (専門科目)	6 credits or above	
subjects (選択必修科目)	Practical subjects (実践科目)	2 credits	
	30 credits or above		

Compulsory and elective subjects in the AAP special course program in the graduate course of Kagawa, Ehime and Kochi universities

# 1. Introductory and developmental subjects (Compulsory subjects) (入門·展開科目/必修科目)

				Classes (週授業	per week ミコマ数)										
Course subject code No.	Special course subject (授業科目)	Credits (単位)	1st (1	1st year (1年)		year 年)	Lecturer or instructor								
(授業コード)*1	(政業行日)		Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	(担当教員)								
Kagawa 970011 Ehime 2 6 X 0 5 Kochi 1 B F 0 1	First-year student seminar*2 (新入生セミナー)	1		1 must take in your first year				-		-		-			Staff of Kagawa, Ehime and Kochi universiti es (香川・愛媛・高知大教員)
Kagawa 970016 Ehime 2 6 X 0 6 Kochi 1 B G 0 2	International agriculture, forestry and fisheries seminar*3 *4 (国際農林水産学セミナー)	1		1			Staff of Kagawa, Ehime and Kochi universiti es (香川・愛媛・高知大教員)								
Kagawa 970020 Ehime 2 6 X 0 2 Kochi 1 B F 0 2	Survival Japanese*2 (サバイバル日本語)	1		1 must take in your first year		*			Staff of Kagawa, Ehime and Kochi universiti es (香川・愛媛・高知大教員)						
Kagawa 970025 Ehime 1 6 X 0 0 Kochi 1 B G 0 1	Summer seminar*5 (サマーセミナー)	2	2				Staff of Kagawa, Ehime and Kochi universiti es (香川・愛媛・高知大教員)								
Kagawa 970030 Ehime 2 6 X 0 3 Kochi 1 B G 0 3	General agriculture*3 (総合農学セミナー)	1	1 ( 0.2 credits		1 ( 0.2 credits 5 subjects )		Staff of Kagawa, Ehime and Kochi universiti es (香川・愛媛・高知大教員)								

#### Note

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*&</sup>lt;sup>1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> Methodology and duration may differ at each university. (実施時期および方法は、各大学で異なる。)

<sup>\*3</sup> Conducted as joint teleconferencing sessions by the 3 universities. (原則として、3 大学間 TV 共同授業で行う。)

<sup>\*4</sup> One of the Ehime University JICA Development Studies Program (JICA-DSP) subjects. (愛媛大学 JICA-DSP 科目の一つ。)

<sup>\*5</sup> Conducted as a joint intensive session by the 3 universities (3 大学間共同で、集中合宿により行う。)

# 2. Research subjects (Compulsory subjects) (研究科目/必修科目)

	Special course subject (授業科目)			Classes (週授業	per week コマ数)							
Course subject code No.		Credits (単位)	1st (1	year 年)	2nd year (2年)		Lecturer or instructor (担当教員)					
(授業コード)*1		(半位)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	(14 ∃	<b>狄</b> 貝/				
Kagawa 970110 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Research planning (生物資源管理研究計画法)	1	1 must take in your first term						Advising professors	(指導教員)		
Kagawa 970111 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Research experiment・investigation I (生物資源管理実験・調査 I)	2	2 must take in your first term		ust take in your		Advising professors	(指導教員)				
Kagawa 970112 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Research experiment・investigation II (生物資源管理実験・調査 II)	2	2 must take in your second term				Advising professors	(指導教員)				
Kagawa 970113 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Research experiment・investigation III (生物資源管理実験・調査III)	2			2 must take in your first term		Advising professors	(指導教員)				
Kagawa 970114 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Research experiment・investigation IV (生物資源管理実験・調査IV)	2			must tak	2 e in your d term	Advising professors	(指導教員)				
Kagawa 970115 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Research presentation I (研究プレゼンテーション技法 I)	1				l e in your term	Advising professors	(指導教員)				
Kagawa 970116 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Research presentation Ⅱ (研究プレゼンテーション技法 Ⅱ)	1			1 must take in your second term		Advising professors	(指導教員)				
Kagawa 970117 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Thesis writing (科学論文作成法)	1								l e in your d term	Advising professors	(指導教員)

#### Note

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)
\*2 Class codes may differ at each advising professor. (授業コードは、各指導教員で異なる。)

Course subject			1st		per week ミコマ数) 2nd	year			
code No.	Special course subject (授業科目)	Credits (単位)	(1	年)	(2	年)	Lecturer or instructor (担当教員)		
(授業コード)*1		(	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	()== 0(3)		
Kagawa 970121 Ehime <sup>*2</sup> Kochi <sup>*2</sup>	Special seminar on bioresource management I(生物資源管理特別演習 I)	1		1 must take in your first term			Advising professors (指導教員)		
Kagawa 970122 Ehime <sup>*2</sup> Kochi <sup>*2</sup>	Special seminar on bioresource management II (生物資源管理特別演習 II)	1		1 e in your d term			Advising professors (指導教員)		
Kagawa 970123 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Special seminar on bioresource management Ⅲ (生物資源管理特別演習Ⅲ)	1				l e in your term	Advising professors (指導教員)		
Kagawa 970124 Ehime* <sup>2</sup> Kochi* <sup>2</sup>	Special seminar on bioresource management IV (生物資源管理特別演習IV)	1						l e in your d term	Advising professors (指導教員)

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

3. Specialized subjects (Elective subjects) (専門科目/選択必修科目)

6 subjects (1 credit  $\times$  6 subjects) are to be selected from the list on pp. 8 $\sim$ 26.

(8~26頁の表にある授業から、合計 6 授業 (1 単位×6 授業) を選択する。)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> Class codes may differ at each advising professor. (授業コードは、各指導教員で異なる。)

4. Practical subjects (Elective subjects) (実践科目/選択必修科目)
One subject is to be selected from the following three subjects. (下記の3授業から1授業を選択する。)

				(週授業	per week コマ数)			
Course subject code No.	Special course subject (授業科目)	Credits (単位)		1st year (1年)		year 年)	Lecturer or instructor	
(授業コード)*1	(反耒州日)	(単位)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	(担当教員)	
Kagawa 970209 Ehime* <sup>3</sup> Kochi 1 B F 0 3	Field study (フィールドスタディー)	2	2				Staff of Kagawa, Ehime and Kochi universiti es (香川・愛媛・高知大教員)	
Kagawa 970210 Ehime 2 6 X 0 4 Kochi 1 B F 0 4	Orientation training: Studies on Japanese culture/Community exchange*2 (日本事情・地域交流)	2	2				Staff of Kagawa, Ehime and Kochi universiti es (香川・愛媛・高知大教員)	
Kagawa 970211 Ehime* <sup>3</sup> Kochi 1 B F 0 5	Internship (インターンシップ)	2	2				Staff of Kagawa, Ehime and Kochi universiti es (香川・愛媛・高知大教員)	

#### Note

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> Methodology and duration may differ at each university. (実施時期および方法は、各大学で異なる。)

<sup>\*3</sup> Class codes may differ at each advising professor. (授業コードは、各指導教員で異なる。)

#### (3. Specialized subjects (Elective subjects) (専門科目/選択必修科目))

Totally 6 subjects (1 unit  $\times$  6 subjects) are to be selected from the following list.

(下表の授業から、合計 6 授業 (1 単位×6 授業) を選択する。

Course subject	Special course subject (授業科目)	Credits (単位)			per week <sup>*2</sup> ミコマ数) 2nd year (2年)		Lecturer or inst (担当教員)	ructor
(授業コード)*1	(IXXIIII)	(4-12-)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	Name (氏名)	University (大学)
Bioresource Produc	ction Science / Plant Resource Production							Kagawa
G970315-1	Advanced vegetable crop production	1	1				OKUDA, Nobuyuki	Kagawa
G970320-1	Postharvest physiology in horticulture	1	1				KOSUGI, Yusuke	Kagawa
G970325-1	Fruit production and improvement	1	1				BEPPU, Kenji	Kagawa
G970480-1	Crop production science	1	1				TOYOTA, Masanori	Kagawa
G970481-1	Crop production science II	1		1			MOROKUMA, Masahiro	Kagawa
Bioresource Produ	ction Science/Plant and Animal Production under Structure							Kagawa
G970340-1	Propagation and breeding of horticultural resources	1			1		TAKAMURA, Takejiro	Kagawa
G970515-1	Advanced floricultural science	1	1				NARUMI, Takako	Kagawa
G970530-1	Advanced animal production science I	1	1				MATSUMOTO, Yoshiki	Kagawa
G970580-1	Advanced animal production science II	1		1			KAWASAKI, Kiyonori	Kagawa

#### Note

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

	Special course subject (授業科目)		Classes per week <sup>*2</sup> (週授業コマ数)				Lecturer or instructor	
Course subject code No. (授業コード)*1		Credits (単位)	1st year (1年)		2nd year (2年)		(担当教員)	
(技業コート)「		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	Name (氏名)	University (大学)
Bioresource Produ	ction Science/Business and Agricultural Economics							Kagawa
G970485-1	Agricultural economics	1	1				MUTO, Yukio	Kagawa
G970490-1	Agricultural marketing and development	1			1		MUTO, Yukio	Kagawa
Applied Bioresourc	ce Science / Food Science							Kagawa
G970360-1	Food protein functionalities	1	1				OGAWA, Masahiro	Kagawa
G970365-1	Mycotoxins and food safety	1	1				KAWAMURA, Osamu	Kagawa
G970565-1	Molecular nutrition of functional foods	1	1				YONEKURA, Lina	Kagawa
G970380-1	Applied enzymology	1				1	WATANABE, Akira TAKATA, Goro MORIMOTO, Kenji YOSHIHARA, Akihide	Kagawa
G970575-1	Processing of agricultural products	1	1				ISHII, Toya	Kagawa
Applied Bioresourc	ee Science / Bioresource Science for Manufacturing							
G970570-1	Bioorganic chemistry	1		1			YANAGITA, Ryo	Kagawa
G970395-1	Plant nutrition	1		1			NOMURA, Mika	Kagawa
G970410-1	Advanced wood biomass chemistry and tree biochemistry	1		1			SUZUKI, Toshisada	Kagawa
G970535-1	Bioactive natural products chemistry	1			1		SATO, Masashi	Kagawa
G970540-1	Biomolecules: Basics and recent developments	1		1			KONG, Lingbing	Kagawa

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject code No. (授業コード)*1	Special course subject (授業科目)	Credits (単位)			per week <sup>*2</sup> ミコマ数) 2nd year (2年)		Lecturer or inst (担当教員)	ructor
	(IXATTE)	(平江)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	Name (氏名)	University (大学)
Applied Bioresourc	ce Science / Bioresource Science for Manufacturing							Kagawa
G970495-1	Molecular and cellular biology	1		1			TABUCHI, Mitsuaki	Kagawa
G970500-1	Applied microbiology	1		1			TANAKA, Naotaka	Kagawa
G970505-1	Animal cell biology	1	1				SUGIYAMA, Yasunori SUEYOSHI, Noriyuki	Kagawa
G970520-1	Molecular plant stress response II	1	1				ICHIMURA, Kazuya	Kagawa
G970545-1	Microbial and plant metabolism	1	1				MOCHIZUKI, Susumu	Kagawa
G970550-1	Bacterial biochemistry	1				1	KATO, Shiro	Kagawa
G970560-1	Molecular Plant Breeding	1		1			SUGITA-KONISHI, Saeko	Kagawa
Life Environment	Conservation Science / Environmental Science							Kagawa
G970420-1	Material cycles and biological processes in the shallow coastal water environment	1		1			ICHIMI, Kazuhiko, YAMAGUCHI, Hitomi	Kagawa
G970425-1	Limnology	1			1		YAMADA, Yoshihiro	Kagawa
G970430-1	Behavior of biophilic elements in the marine environment	1		1			ICHIMI, Kazuhiko	Kagawa
G970510-1	Evolutionary ecology	1		1			YASUI, Yukio	Kagawa
G970555-1	Plants in ecological systems	1		1			KOBAYASHI, Tsuyoshi	Kagawa

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject code No. (授業コード)*1	Special course subject (授業科目)	Credits (単位)	Classes p (週授業 year 年)	コマ数)	year	Lecturer or inst (担当教員)	ructor	
(授業コード) 1				Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	Name (氏名)	University (大学)
Bioresource Produ	uction Science / Plant Resource Production							Ehime
	Crop production physiology	1	1				ARAKI, Takuya	Ehime
	Molecular genetics of plant virus resistance	1		1			KOBAYASHI, Kappei	Ehime
	Soil fertility and plant production	1	1				UENO, Hideto	Ehime
	Organismal ecology and evolution	1	1				KAMIYA, Koichi	Ehime
	Forest Ecology	1	1				SHIMAMURA, Tetsuya	Ehime
	Terrestrial global productivity	1	1				TSUZUKI, Hayato	Ehime
Bioresource Produ	uction Science/Plant and Animal Production under Structure							Ehime
	Information technology	1		1			HATO, Kenji	Ehime

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. Ehime University's codes will be notified later. (授業コードは、各大学で異なる。愛媛大学の授業コードは別途通知する。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject code No. (授業コード)*1	Special course subject (授業科目)	Credits (単位)		Classes p (週授業 year 年)		year	Lecturer or inst (担当教員)	ructor
(授業コード)*1	(IXXIII E)	(	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	Name (氏名)	University (大学)
Bioresource Prod	uction Science / Aquaculture and Livestock Production							Ehime
	Conservation genetics	1		1			TAKAGI, Motohiro	Ehime
	Fish reproductive physiology	1		1			MIURA, Takeshi	Ehime
Bioresource Prod	uction Science/Bioresource Economics							Ehime
	Agricultural land management	1		1			MATSUOKA, Atsushi	Ehime
	Social management system of coastal zone	1			1 or	1	TAKENOUCHI, Naruhito	Ehime
Bioresource Prod	uction Science Food Science							Ehime
	Nutritional epidemiology	1	1				MARUYAMA, Kotatsu	Ehime

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*&</sup>lt;sup>1</sup> Class codes may differ at each university. Ehime University's codes will be notified later. (授業コードは、各大学で異なる。愛媛大学の授業コードは別途通知する。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject	Special course subject (授業科目)	Credits (単位)		(週授業 year	er week <sup>*2</sup> コマ数) 2nd (2 <sup>4</sup>	year	Lecturer or inst (担当教員)	ructor
(授業コード)*1	(DATE)	(4-121)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	Name (氏名)	University (大学)
Applied Bioresou	rce Science / Bioresource Science for Manufacturing							Ehime
	Organic chemistry	1	1				YAMAUCHI, Satoshi	Ehime
	Organic synthesis	1			1		YAMAUCHI, Satoshi	Ehime
	Cellular regulation technology	1	1				SUGAHARA, Takuya	Ehime
	Mode of action of bioactive molecules in foods	1		1			NISHI, Kosuke	Ehime
	Chemistry of wood products	1		1			ITO, Kazutaka	Ehime
	Genetic engineering and molecular biology	1		1			AKIYAMA, Koichi	Ehime

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. Ehime University's codes will be notified later. (授業コードは、各大学で異なる。愛媛大学の授業コードは別途通知する。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject code No.	Special course subject (授業科目)	Credits (単位)		Classes p (週授業 year 年)	コマ数)	year	Lecturer or inst (担当教員)	ructor
(授業コード)*1	(IXXIIII)	(十四)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	Name (氏名)	University (大学)
Life Environment	Conservation Science/Land Conservation and Irrigation Engin	eering						Ehime
	Biospheric aspects of atmospheric and hydrological processes	1		1 or		1	OUE, Hiroki	Ehime
	Wastewater treatment and reuse	1	1				HARUTA, Shinsuke	Ehime
Life Environment	Conservation Science/Environmental Science							Ehime
	Taxonomy and systematics	1		1			YOSHITOMI, Hiroyuki	Ehime
International devel	opment of agriculture, forestry and fisheries sciences/JICA De	velopment	Studies Pr	rogram (JIC	CA-DSP)			
	Development history of agriculture, forestry and fisheries in Japan	2	2 or		2		Ehime University instructors	Ehime
	Resilient agriculture, forestry and fisheries in Japan with risk management	1	1 or		1		KOBAYASHI, Osamu	Ehime

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

Students elect subjects from this table after consulting with their academic supervisor and academic advisor.(指導教員のアドバイスを受けて、表に示す授業を履修すること。)

 $\label{eq:JICA-DSP-PROBLEM} \textbf{JICA-DSP} \cdot \cdot \cdot \textbf{Certified program for JICA trainees}. \ \textbf{Ehime University JICA students must take this program}.$ 

(JICA 研修員向け認定プログラム。 愛媛大学在籍の JICA 研修員は必修)

It is composed of three subjects as follows: (プログラムは次の3科目で構成されている。)

- 1. International agriculture, forestry and fisheries seminar (See 1.Introductory and developmental subjects)
- 2. Development history of agriculture, forestry and fisheries in Japan
- 3. Resilient agriculture, forestry and fisheries in Japan with risk management

<sup>\*1</sup> Class codes may differ at each university. Ehime University's codes will be notified later. (授業コードは、各大学で異なる。愛媛大学の授業コードは別途通知する。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject code No. (授業コード)*1	Special course subject (授業科目)	Credits (単位)	(週授業	er week <sup>*2</sup> コマ数) 2nd year (2年)	Lecturer or inst (担当教員)	
(技業コート)・1	Agriculture, Forestry, Bioresource and Environmental Sciences Course		Spring Fall term term (春学期)(秋学期)	Spring Fall term term (春学期)(秋学期)	Name (氏名)	University (大学)
Agriculture, Fore	stry, Bioresource and Environmental Sciences Course					Kochi
1 B H O 1	Advanced Agriculture, Forestry, Bioresource and Environmental Sciences I-I	2	2		Staff of Kochi university	Kochi
	Advanced Agriculture, Forestry, Bioresource and Environmental Sciences I-II					
1 B H O 2	Advanced Agriculture, Forestry, Bioresource and Environmental Sciences II-I	2	2		Staff of Kochi university	Kochi
	Advanced Agriculture, Forestry, Bioresource and Environmental Sciences II-II					

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject	Special course subject	Credits (単位)		Classes p (週授業 year 年)	コマ数)	vear	Lecturer or inst (担当教員)	ructor
(授業コード)*1	(授業科目)	(単位)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term	Name (氏名)	University (大学)
Agriculture, Fore	stry, Bioresource and Environmental Sciences Course							Kochi
1 B H O 3	Advanced Horticultural breeding I	2	2				NAKANO, Michiharu	Kochi
	Advanced Horticultural breeding II							
1 <b>B H</b> O 6	Advanced Local Resources Utilization I	2		2			MASUDA, Kazuya	Kochi
	Advanced Local Resources Utilization II							
1 B H O 7	Advanced Animal Science I	2			2		MATSUKAWA,	Kochi
	Advanced Animal Science II						Kazutsugu	
1 B H O 9	Advanced Crop Science I	2		2			MIYAZAKI, Akira	Kochi
	Advanced Crop Science II							
1 B H 1 3	Advanced Behavioural Ecology I	2		2			ITO, Katsura	Kochi
	Advanced Behavioural Ecology II							
1 B H 1 5	Advanced Ecological Biochemistry I	2	2				TEBAYASHI, Shin-ichi	Kochi
	Advanced Ecological Biochemistry II							
1 B H 1 6	Advanced Agricultural Meteorology I	2		2			MORI, Makito	Kochi
	Advanced Agricultural Meteorology II							

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject	Special course subject (授業科目)	Credits (単位)		(週授業 year	er week <sup>*2</sup> コマ数) 2nd (2:	vear	Lecturer or inst (担当教員)		
(授業コード)*1	(汉朱竹 日)	(十匹)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term	Name (氏名)	University (大学)	
Agriculture, Fore	stry, Bioresource and Environmental Sciences Course							Kochi	
1 B H 1 7	Advanced Plant Resources and Functional Science I	2	2				SAKATA, Mitsukazu	Kochi	
	Advanced Plant Resources and Functional Science II	-							
1 B H 1 8	Advanced lecture on forest products I	2		2			ICHIURA, Hideaki	Kochi	
	Advanced lecture on forest products II	-							
1 B H 2 0	Advanced lecture on forest engineering I	2		2			SUZUKI, Yasushi	Kochi	
	Advanced lecture on forest engineering II	-							
1 B H 2 3	Advanced Food Production Process Technology I	2	2				KAWANO, Toshio	Kochi	
	Advanced Food Production Process Technology II	-							
1 B H 2 4	Advanced Water Environmental Engineering I	2		2			IHARA, Masaru	Kochi	
	Advanced Water Environmental Engineering II	-							
1 B H 2 7	Advanced Environmental Water Management Engineering I	2	2				SATO, Shushi	Kochi	
	Advanced Environmental Water Management Engineering II	-							
1 B H 2 9	Advanced Geographic Information Science I	2	2				HASHIMOTO,	Kochi	
	Advanced Geographic Information Science II	<del>.</del>					Naoyuki		

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject	Special course subject (授業科目)	Credits (単位)		(週授業 vear		year	Lecturer or inst (担当教員)	tructor	
(授業コード)*1	(以朱竹百)	(十匹)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term	Name (氏名)	University (大学)	
Agricultural Chei	mistry Course							Kochi	
1 B L O 1	Advanced Plant Growth Environmental Science I	2	2				MORITSUKA, Naoki	Kochi	
	Advanced Plant Growth Environmental Science II								
1 B L O 2	Advanced Plant Nutrition I	2	2				UENO, Daisei	Kochi	
	Advanced Plant Nutrition II								
1 B L 0 3	Advanced Soil Environmental Science I	2	2				KANG, Yumei	Kochi	
	Advanced Soil Environmental Science II								
1 B L 0 4	Advanced Soil Science and Ecology I	2	2				TANAKA Sota	Kochi	
	Advanced Soil Science and Ecology II								
1 B L O 5	Advanced Plant-Microbe Interactions Study I	2		2			HIKICHI, Yasufumi	Kochi	
	Advanced Plant-Microbe Interactions Study II								
1 B L O 6	Advanced Plant Pathology I	2	2				KIBA, Akinori	Kochi	
	Advanced Plant Pathology II								
1 B L 0 8	Advanced Biomaterials Chemistry I	2		2			ASHIUCHI, Makoto	Kochi	
	Advanced Biomaterials Chemistry II								

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject				Classes p (週授業	コマ数)		Lecturer or instructor (担当教員)	
code No	Special course subject (授業科目)	Credits (単位)	1st (1	year 年)	2nd (2	year 年)		
(授業コード)*1	(汉未代日)	(単征)	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	Name (氏名)	University (大学)
Agricultural Che	emistry Course							Kochi
1 B L 1 1	Advanced Food Functional Chemistry I	2	2				KASHIWAGI,	Kochi
	Advanced Food Functional Chemistry II						Takehiro	
1 B L 1 2	Advanced Food Chemistry I	2	2				SHIMAMURA,	Kochi
	Advanced Food Chemistry II						Tomoko	
1 B L 1 4	Advanced Applied Microbiology I	2	2				MURAMATSU,	Kochi
	Advanced Applied Microbiology II						Hisashi	
1 B N O 1	Plant Growth Environmental Science Laboratory I	2		2			MORITSUKA,	Kochi
	Plant Growth Environmental Science Laboratory II						Naoki	
1 B N 0 2	Plant Growth Environmental Science Laboratory III	2	2				MORITSUKA,	Kochi
	Plant Growth Environmental Science Laboratory IV						Naoki	
1 <b>B</b> N 0 3	Plant Growth Environmental Science Laboratory V	2				2	MORITSUKA,	Kochi
	Plant Growth Environmental Science Laboratory VI						Naoki	
1 B N O 4	Plant Growth Environmental Science Laboratory VII	2			2		MORITSUKA,	Kochi
	Plant Growth Environmental Science Laboratory VIII						Naoki	

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject	C	Credits	1 c t		per week*2 コマ数)	year	Lecturer or instructor (担当教員)	
code No. (授業コード)*1	Special course subject (授業科目)	(単位)	(1: Spring term (春学期)	年) Fall term (秋学期)	(2) Spring term (春学期)	年) Fall term (秋学期)	Name (氏名)	University (大学)
Agricultural C	hemistry Course							Kochi
1 B N O 5	Plant Nutrition Laboratory I	2		2			UENO, Daisei	Kochi
	Plant Nutrition Laboratory II							
1 B N O 6	Plant Nutrition Laboratory III	2	2				UENO, Daisei	Kochi
	Plant Nutrition Laboratory IV							
1 B N O 7	Plant Nutrition Laboratory V	2				2	UENO, Daisei	Kochi
	Plant Nutrition Laboratory VI							
1 <b>B N</b> 0 8	Plant Nutrition Laboratory VII	2			2		UENO, Daisei	Kochi
	Plant Nutrition Laboratory VIII							
1 B N 0 9	Soil Environmental Science Laboratory I	2		2			KANG, Yumei	Kochi
	Soil Environmental Science Laboratory II							
1 B N 1 0	Soil Environmental Science Laboratory III	2	2				KANG, Yumei	Kochi
	Soil Environmental Science Laboratory IV							
1 B N 1 1	Soil Environmental Science Laboratory V	2				2	KANG, Yumei	Kochi
	Soil Environmental Science Laboratory VI							
1 B N 1 2	Soil Environmental Science Laboratory VII	2			2		KANG, Yumei	Kochi
	Soil Environmental Science Laboratory VIII							

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject		Credits	1ct		per week*2 ミコマ数)	year	Lecturer or ins (担当教員	tructor
code No. (授業コード)*1	Special course subject (授業科目)	(単位)	Spring term	年) Fall term (秋学期)	(2) Spring term (春学期)	年) Fall term (秋学期)	Name (氏名)	University (大学)
Agricultural Ch	emistry Course							Kochi
1BN13	Soil Science Laboratory I	2		2			TANAKA Sota	Kochi
	Soil Science Laboratory II							
1 B N 1 4	Soil Science Laboratory III	2	2				TANAKA Sota	Kochi
	Soil Science Laboratory IV							
1 B N 1 5	Soil Science Laboratory V	2				2	TANAKA Sota	Kochi
	Soil Science Laboratory VI							
1 B N 1 6	Soil Science Laboratory VII	2			2		TANAKA Sota	Kochi
	Soil Science Laboratory VIII							
1 B N 1 7	Plant-Microbe Interactions Study seminar Laboratory I	2		2			HIKICHI, Yasufumi	Kochi
	Plant-Microbe Interactions Study seminar Laboratory II							
1BN18	Plant-Microbe Interactions Study seminar Laboratory III	2	2				HIKICHI, Yasufumi	Kochi
	Plant-Microbe Interactions Study seminar Laboratory IV							
1 B N 1 9	Plant-Microbe Interactions Study seminar Laboratory V	2				2	HIKICHI, Yasufumi	Kochi
	Plant-Microbe Interactions Study seminar Laboratory VI							
1 B N 2 0	Plant-Microbe Interactions Study seminar Laboratory VII	2			2		HIKICHI, Yasufumi	Kochi
	Plant-Microbe Interactions Study seminar Laboratory VIII							

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject				Classes p (週授業			Lecturer or ins (担当教員	tructor	
code No	Special course subject (授業科目)	Credits (単位)	(1:	year 年)	(24	year 年)	(, + // (	,	
(授業コード)*1	(汉末行日)	(1 14)	Spring term (春学期)	Fall term	Spring term (春学期)	Fall term	Name (氏名)	University (大学)	
Agricultural Ch	emistry Course							Kochi	
1 B N 2 1	Plant Pathology Laboratory I	2		2			KIBA, Akinori	Kochi	
	Plant Pathology Laboratory II								
1 B N 2 2	Plant Pathology Laboratory III	2	2				KIBA, Akinori	Kochi	
	Plant Pathology Laboratory IV								
1 B N 2 3	Plant Pathology Laboratory V	2				2	KIBA, Akinori	Kochi	
	Plant Pathology Laboratory VI								
1 B N 2 4	Plant Pathology Laboratory VII	2			2		KIBA, Akinori	Kochi	
	Plant Pathology Laboratory VIII								
1 B N 2 9	Biomaterials Chemistry Laboratory I	2		2			ASHIUCHI, Makoto	Kochi	
	Biomaterials Chemistry Laboratory II								
1 B N 3 0	Biomaterials Chemistry Laboratory III	2	2				ASHIUCHI, Makoto	Kochi	
	Biomaterials Chemistry Laboratory IV								
1 B N 3 1	Biomaterials Chemistry Laboratory V	2				2	ASHIUCHI, Makoto	Kochi	
	Biomaterials Chemistry Laboratory VI								
1 B N 3 2	Biomaterials Chemistry Laboratory VII	2			2		ASHIUCHI, Makoto	Kochi	
	Biomaterials Chemistry Laboratory VIII								

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject code No. (授業コード)*1	Special course subject (授業科目)		Classes per week <sup>*2</sup> (週授業コマ数) 1st year 2nd year				Lecturer or instructor (担当教員)	
		Credits (単位)	(1年)		(2年)			
		, , ,,	Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term (秋学期)	Name (氏名)	University (大学)
Agricultural Ch	emistry Course							Kochi
1BN41	Food Functional Chemistry Laboratory I	2		2			KASHIWAGI,	Kochi
	Food Functional Chemistry Laboratory II						Takehiro	
1 B N 4 2	Food Functional Chemistry Laboratory III	2	2				KASHIWAGI,	Kochi
	Food Functional Chemistry Laboratory IV						Takehiro	
1BN43	Food Functional Chemistry Laboratory V	2				2	KASHIWAGI,	Kochi
	Food Functional Chemistry Laboratory VI						Takehiro	
1 B N 4 4	Food Functional Chemistry Laboratory VII	2			2		KASHIWAGI,	Kochi
	Food Functional Chemistry Laboratory VIII						Takehiro	
1 B N 4 5	Food Chemistry Laboratory I	2		2			SHIMAMURA,	Kochi
	Food Chemistry Laboratory II						Tomoko	
1 B N 4 6	Food Chemistry Laboratory III	2	2				SHIMAMURA,	Kochi
	Food Chemistry Laboratory IV						Tomoko	
1 B N 4 7	Food Chemistry Laboratory V	2				2	SHIMAMURA,	Kochi
	Food Chemistry Laboratory VI						Tomoko	
1 B N 4 8	Food Chemistry Laboratory VII	2			2		SHIMAMURA,	Kochi
	Food Chemistry Laboratory VIII						Tomoko	

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject code No. (授業コード)*1	Special course subject (授業科目)	Credits (単位)	Classes per week*2 (週授業コマ数) 1st year 2nd year (1年) (2年)			year	Lecturer or instructor (担当教員)	
			Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term	Name (氏名)	University (大学)
Agricultural Ch	emistry Course							Kochi
1 B N 5 3	Applied Microbiology Laboratory I	2		2			MURAMATSU,	Kochi
	Applied Microbiology Laboratory II						Hisashi	
1 B N 5 4	Applied Microbiology Laboratory III	2	2				MURAMATSU,	Kochi
	Applied Microbiology Laboratory IV						Hisashi	
1 B N 5 5	Applied Microbiology Laboratory V	2				2	MURAMATSU,	Kochi
	Applied Microbiology Laboratory VI						Hisashi	
1 B N 5 6	Applied Microbiology Laboratory VII	2			2		MURAMATSU,	Kochi
	Applied Microbiology Laboratory VIII						Hisashi	
Marine Resource Science Course								Kochi
1 B P O 4	Advanced Aquatic Environmental Science I	2	2				ADACHI, Masao	Kochi
	Advanced Aquatic Environmental Science II							
1 B P O 5	Advanced Coastal Ecology and Conservation I	2	2				IKEJIMA, Kou	Kochi
	Advanced Coastal Ecology and Conservation II							

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)

Course subject code No. (授業コード)*1	Special course subject (授業科目)	Credits (単位)	Classes per week*2 (週授業コマ数) lst year 2nd year (1年) (2年)			year	Lecturer or instructor (担当教員)	
			Spring term (春学期)	Fall term (秋学期)	Spring term (春学期)	Fall term	Name (氏名)	University (大学)
Marine Resource	Science Course							Kochi
1 B P 1 0	Advanced Marine Biotechnology I	2		2			ADACHI, Kohsuke	Kochi
	Advanced Marine Biotechnology II							
1 B P 1 1	Advanced Fish Ecology I	2	2				NAKAMURA, Yohei	Kochi
	Advanced Fish Ecology II							
1 B P 1 2	Advanced Fish Nutrient Physiology I	2		2			FUKADA, Haruhisa	Kochi
	Advanced Fish Nutrient Physiology II							
1BP13	Advanced Aquatic Microbial Ecology I	2		2			YAMAGUCHI,	Kochi
	Advanced Aquatic Microbial Ecology II						Haruo	
1 B P 2 8	Advanced Physiology and Biochemistry of Marine Organisms I	2		2			KUBOTA, Satoshi	Kochi
	Advanced Physiology and Biochemistry of Marine Organisms II							
1 B P 2 9	Advanced Marine Virology I	2	2				NAGASAKI, Keizo	Kochi
	Advanced Marine Virology II							
1 B P 3 2	Advanced Microbiology I	2	2				TERAMOTO, Maki	Kochi
	Advanced Microbiology II							
1 B P 3 3	Advanced Molecular Pharmacology I	2	2				NAMBA, Takushi	Kochi
	Advanced Molecular Pharmacology II							
N								

Spring term: April-September Fall term: October-March (春学期:4月~9月 秋学期:10月~3月)

<sup>\*1</sup> Class codes may differ at each university. (授業コードは、各大学で異なる。)

<sup>\*2</sup> If time schedule is not specified, ask it to the lecturer directly or through your advising professor. (開講時期が明示されていない場合は、直接あるいは指導教員を通じて授業担当教員に確認すること。)