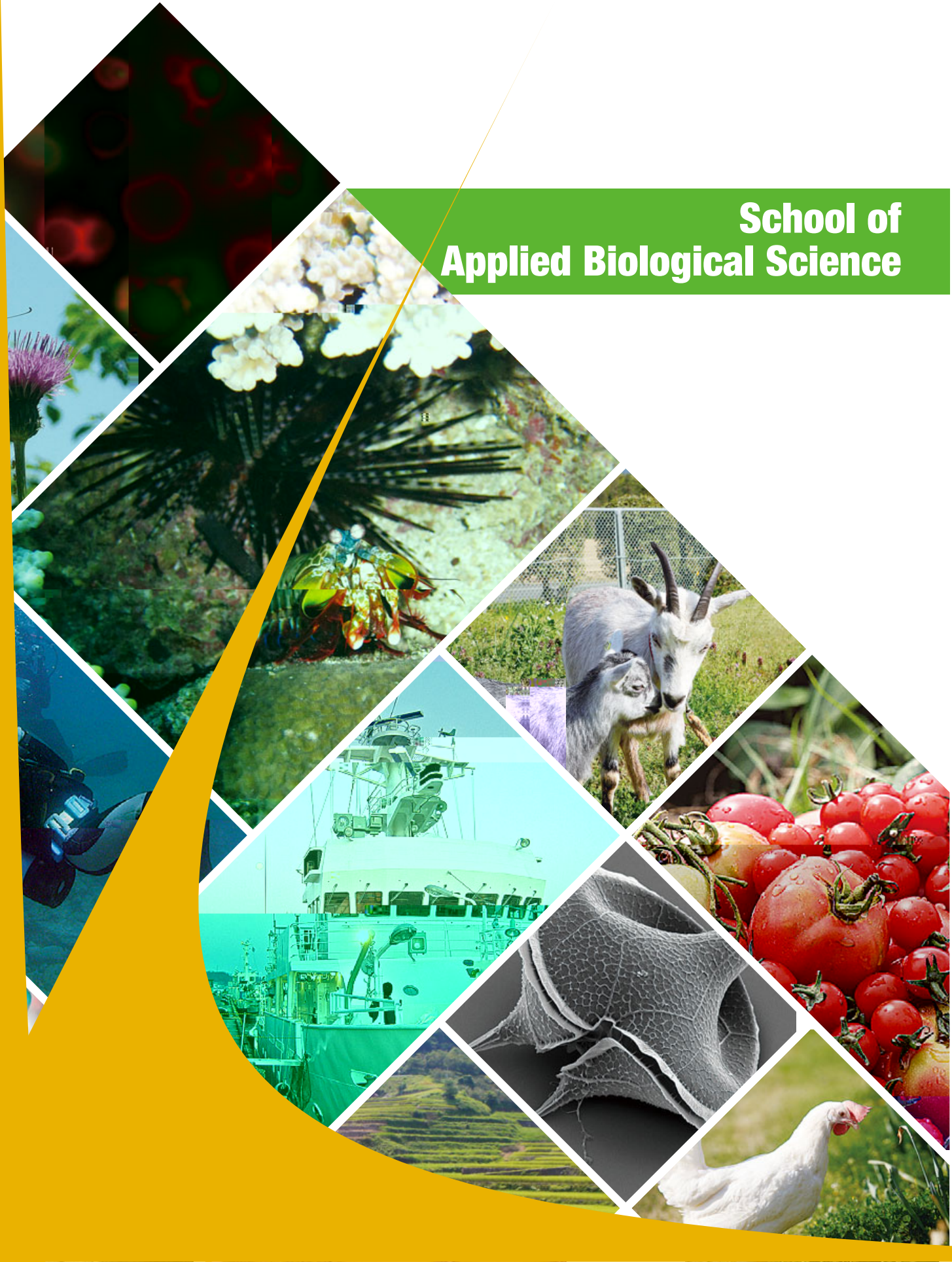
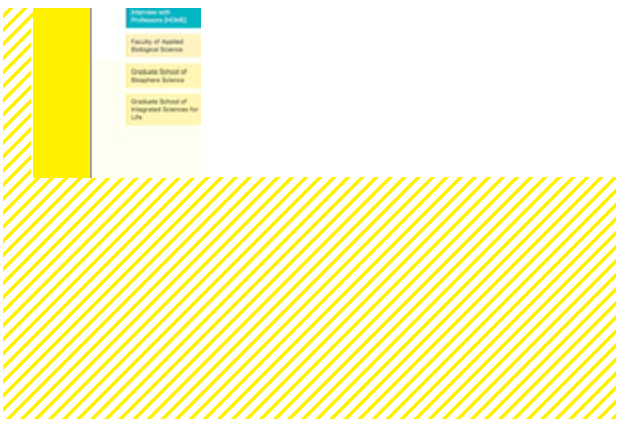
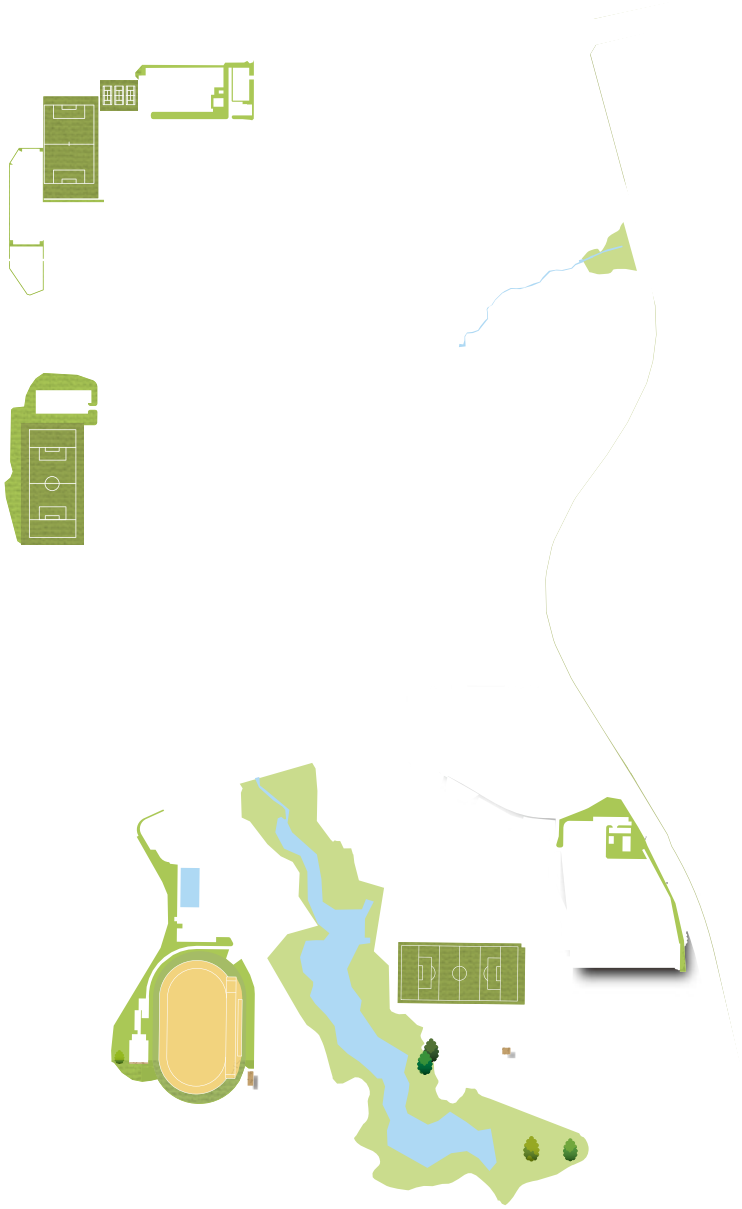
School of Applied Biological Science




Faculty of Applied Biological Science
Graduate School of Biosphere Science
Graduate School of Integrated Sciences for Life

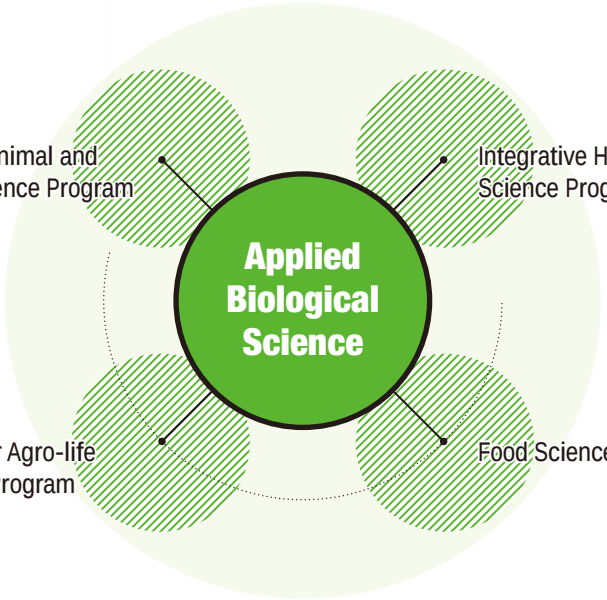


Program Outline

Toward the sustainable production of foods and the utilization of biological resources

Develop students who can contribute to society with a broad perspective

The School of Applied Biosphere Science aims to acquire a wide range of knowledge and wisdom from natural science and social science related to biological production. Specifically, it seeks (1) basic knowledge related to food production, biological resources, biological environment, biotechnology, (2) actual field science experience, (3) understanding of bioethics and ethics, (4) languages such as English to provide education aimed at acquiring information processing skills.



Animal production
Plant production
Biological environment
Biological resources
Biological functions

Applied Animal and Plant Science Program

Integrative Hydrosphere Science Program

Marine ecosystem
Hydrosphere environment
Aquatic life
Fishery resources
Field works

Genome science
Biological material
Systemic life
Biotechnology
Health care

Molecular Agro-life Science Program

Food Science Program

Food production management

1st year		2nd year		3rd year		4th year	
1st semester	2nd semester	1st semester	2nd semester	1st semester	2nd semester	1st semester	2nd semester
General Education Courses		Basic Specialized Courses		Specialized Courses		Graduation research activities	

→ Employment
Higher education

1st year Focus on liberal arts subjects.

2nd year Learn specialized basic subjects and belong to each program.

3rd year Learn more about your area of expertise and belong to a laboratory.

4th year Focus on graduation research activities.

Food Science Program

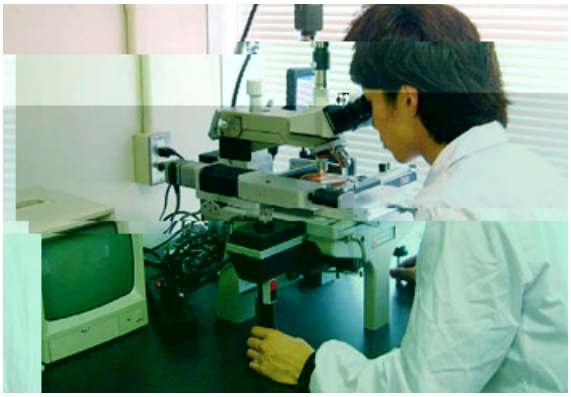
Toward the creation of healthy and rich dietary culture

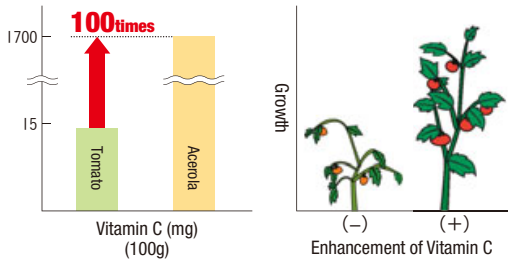
This program aims to develop human resources who can contribute towards creating a healthy and rich dietary culture. To this end, it provides students with specialist lecture classes, and opportunities to carry out experiments, receive practical training for food production and to visit food factories so that they can obtain basic knowledge and skills ranging from sustainable food production and distribution management to development and manufacturing of safe, highly functional and high-quality food, and applied skills for solving various problems in the food industry.
Specific subjects that students learn include: (1) production management and distribution of food, (2) manufacturing and processing of food, (3) food safety, (4) nutrition and functionality of food, (5) physical properties and flavor of food, and (6) effective use of food resources.

Molecular Agro-life Science Program

To elucidate biotic functions and create state-of-the-art biotechnology

This program aims to clarify sophisticated functions of various living creatures, including microorganisms, plants and animals, using state-of-the-art technologies at the molecular or cellular level of genes and proteins, and apply biotic functions for solving food, medical and environmental problems.
In this program, students can learn necessary knowledge and skills for clarifying biotic functions and their significance in nature and developing leading-edge biotechnology, and obtain capabilities to apply such knowledge and skills by (1) elucidating diversified life phenomena of microorganisms, plants and animals, (2) conducting basic studies for development of valuable enzymes, potent antibodies and anticancer drugs by applying biotic functions, (3) creating valuable transgenic plants and animals using gene recombination technologies and cellular engineering and (4) learning about chemical substances produced by microorganisms, plants and animals.





can work in the global community

of learning provided by the School of Applied Biological Science, but also acquire

kes lecture classes and experiment exercises of major subjects in the Integrative
or a major field of each student's choice (packaged major subjects by field), and
course of this process, students acquire an ability to identify problems, work out

actical training and project studies that are provided at both Hiroshima University

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