

## National chiayi university

### Department of Biological Resources

#### The courses for undergraduate student

#### Rules and Restrictions regarding courses and credits:

Total number of credits needed for graduation: 128 ,

Including Professional Compulsory credits: 62, Professional elective credits: 36, General Education Credits: 30

<b>Freshman</b>				
<b>Required</b>				
Course	Semester	Hours	Credits	Note
Biology	1	2	2	
Biology Lab.	1	3	1	
General Chemistry	1	3	3	
General Chemistry Lab	1	3	1	
General Physics	1	2	2	
General Physics Lab.	1	3	1	
Introduction to Environment Science	1	2	2	
Biology (II)	2	4	4	
Biology Lab. (II)	2	3	1	
Organic Chemistry	2	3	3	
Organic Chemistry Lab.	2	3	1	
Microbiology	2	3	3	
Microbiology Lab.	2	3	1	
Calculus	2	2	2	
<b>Total credits of Professional Compulsory course</b>			27	
<b>Total credits of the year</b>			27	

<b>Sophomore</b>				
<b>Required</b>				

Course	Semester	Hours	Credits	Note
Analytical Chemistry	1	3	3	
Analytical Chemistry Lab.	1	3	1	
Biochemistry (I)	1	3	3	
Biochemistry Lab. (I)	1	3	1	
Biodiversity	1	3	3	
Ecology (I)	1	2	2	
Biochemistry (II)	2	3	3	
Biochemistry Lab. (II)	2	3	1	
Ecology (II)	2	2	2	
Systematics	2	3	3	
<b>Total credits of Professional Compulsory course</b>			22	
<b>selected</b>				
Entomology	1	2	2	
Entomology Lab.	1	3	1	
Plant Morphology	1	2	2	
Plant Morphology Lab.	1	2	1	
Plant Pathogens	1	3	3	
Invertebrate Zoology	1	3	3	
Conservation of Endangered Species	1	2	2	
Vertebrates	2	2	2	
Cell Biology	2	3	3	
Bacteriology	2	2	2	
Plant Anatomy	2	2	2	
Plant Anatomy Lab.	2	3	1	
Apiculture	2	2	2	
Plant Protection & Lab.	3	4	2	
<b>Total credits of Professional Elective course</b>			28	
<b>Total credits of the year</b>			50	

## Junior

### Required

Course	Semester	Hours	Credits	Note
Biostatistics	1	3	3	
Genetics	1	2	2	
Genetics Lab.	1	3	1	
Techniques of Sampling and Survey of Bioresources	2	2	2	
Techniques of Sampling and Survey of Bioresources Lab.	2	4	2	
Natural Conservation Law and Policy	2	2	2	
<b>Total credits of Professional Compulsory course</b>			12	

### selected

Mycology	1	3	3	
Animal Behavior	1	2	2	
Ecology and Application of Weeds	1	3	3	
Plant Physiology	1	2	2	
Plant Physiology Lab.	1	3	1	
Introduction to Plant Protection (I)	1	2	2	
Insect Resources	1	2	2	
Pesticides	1	2	2	
Global Changes and Sustainable Development	1	2	2	
Weed Control	1	2	2	
Insect Taxonomy	2	2	2	
Insect Taxonomy Lab.	2	3	1	
Floral Diseases	2	2	2	
Biology Control	2	2	2	
Biological Control Lab.	2	3	1	
Comparative Anatomy of the Vertebrates & Lab.	2	3	3	
Plant Taxonomy	2	2	2	
Plant Taxonomy Lab.	2	3	1	

Introduction to Plant Protection (II)	2	2	2	
Mushroom	2	2	2	
Evolution	2	2	2	
<b>Total credits of Professional Elective course</b>			41	
<b>Total credits of the year</b>			53	

<b>Senior</b>				
<b>Required</b>				
Course	Semester	Hours	Credits	Note
Seminar (I )	1	2	1	
Seminar (II )	2	2	1	
<b>Total credits of Professional Compulsory course</b>			2	
<b>selected</b>				
Biogeography	1	2	2	
Ecological Theory	1	2	2	
Social Insects	1	3	3	
Scientific Japanese	1	2	2	
Oceanology	1	2	2	
Plant Diseases Diagnosis and Management	1	3	3	
Plant Insect-Pest Diagnosis and Management	1	3	3	
Plant Medicine Practical Training and Management	1	3	3	
Guidance of Japanese Scientific Paper	2	2	2	
Global Climate Changes	2	3	3	
Eatable Insects	2	2	2	
Mammalogy and Lab.	2	3	3	
Plant Ecology	2	2	2	
Limnology	2	2	2	
<b>Total credits of Professional Elective course</b>			34	
<b>Total credits of the year</b>			36	

\* Name of elective courses may be changed with the technology transaction.