

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for BSc Degree

BSc First Year

Semester I

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
မ-၁၀၀၁	မြန်မာစာ	3	2	2
Eng - 1001	English	3	2	2
Zool - 1101	Organization and Variety of Life	4	3	2
Elective Bot - 1001	Botany*	3	2	2
Elective Chem- 1001	Chemistry*	3	2	2
Elective AM - 1001	Aspects of Myanmar*	3	2	2
	Total	19	13	12

* A student requires to take **three** electives, each with 3 credits to fulfill a **total of 19 credit points**.

Foundation courses

- မ-၁၀၀၁ (3) (2-2) မြန်မာစာ
- Eng - 1001 (3) (2-2) English

Core course

- Zool - 1101 (4) (3-2) Organization and Variety of Life

Elective courses

- Bot- 1001 (3) (2-2) Varieties of Plants and Their Relatives
- Chem - 1001 (3) (2-2) General Chemistry I
- AM - 1001 (3) (2-2) Aspects of Myanmar

Elective courses for other specialization

- Zool - 1001 Animal Kingdom and Organization of Life Forms

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for BSc Degree

BSc First Year			Semester II	
Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
မ-၁၀၀၂	မြန်မာစာ	3	2	2
Eng -1002	English	3	2	2
Zool - 1102	Life Processes and Homeostasis	4	3	2
Elective Bot - 1002	Botany*	3	2	2
Elective Chem - 1002	Chemistry*	3	2	2
Elective AM - 1002	Aspects of Myanmar*	3	2	2
Total		19	13	12

* A student requires taking **three** electives, each with 3 credits to fulfill a **total of 19 credit points**.

Foundation courses

- မ-၁၀၀၂ (3) (2-2) မြန်မာစာ
- Eng - 1002 (3) (2-2) English

Core course

- Zool - 1102 (4) (3-2) Life Processes and Homeostasis

Elective courses

- Bot - 1002 (3) (2-2) Importance of Plants
- Chem - 1002 (3) (2-2) General Chemistry II
- AM - 1002 (3) (2-2) Aspects of Myanmar

Elective courses for other specialization

- Zool - 1002 Chemicals of Life and Life Processes

BSc Second Year

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Eng- 2001	English	3	2	2
Zool - 2101	Protista and Lower Invertebrates	4	3	2
Zool - 2102	Mollusca	4	3	2
Zool - 2103	Arthropoda	4	3	2
Elective Zool- 2104	Acoelomata and Coelomata	3	2	2
Elective Zool - 2105/ Zool - 2106	Miscellaneous Phyla / Echinodermata	3	2	2
	Total	21	15	12

Foundation course

- ## Core courses

- ## Elective courses

- ### Elective courses for other specialization

- Zool - 2001 Invertebrate Zoology

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for BSc Degree

BSc Second Year

Semester II

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Eng – 2002	English	3	2	2
Zool – 2111	Ichthyology	4	3	2
Zool – 2112	Herpetology	4	3	2
Zool – 2113	Ornithology	4	3	2
Elective Zool – 2114	Mammalogy	3	2	2
Elective Zool – 2115/ Zool – 2116	Protochordates and Cyclostomes Comparative Anatomy	3	2	2
Total		21	15	12

* A student can choose **any two** electives, each with 3 credit points to fulfill a total of **21 credit points**.

Foundation course

- Eng – 2002 (3) (2-2) English

Core courses

- Zool – 2111 (4) (3-2) Ichthyology
- Zool – 2112 (4) (3-2) Herpetology
- Zool – 2113 (4) (3-2) Ornithology

Elective courses

- Zool – 2114 (3) (2-2) Mammalogy
- Zool – 2115 (3) (2-2) Protochordates and Cyclostomes
- Zool – 2116 (3) (2-2) Comparative Anatomy

Elective courses for other specialization

- Zool – 2002 Vertebrate Zoology

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for BSc Degree

BSc Third Year/ 1st Year Honours

Semester I

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Eng- 3001	English	3	2	2
Zool – 3101/3201	Taxonomy and Nomenclature	4	3	2
Zool – 3102/3202	Ecology	4	3	2
Zool- 3103/3203	Zoogeography	4	3	2
Zool – 3104/3204	Descriptive Statistics	4	3	2
Elective Zool – 3105/3205 Zool – 3106/3206	Palaeontology Animal Behaviour	3	2	2
	Total	22	16	12

* A student can choose any one elective offered to fulfill a total of 22 credit points.

Foundation course

- Eng – 3001 (3) (2-2) English

Core courses

- Zool – 3101/3201 (4) (3-2) Taxonomy and Nomenclature
- Zool – 3102/3202 (4) (3-2) Ecology
- Zool – 3103/3203 (4) (3-2) Zoogeography
- Zool – 3104/3204 (4) (3-2) Descriptive Statistics

Elective courses

- Zool – 3105/3205 (3) (2-2) Palaeontology
- Zool – 3106/3206 (3) (2-2) Animal Behaviour

Elective courses for other specialization

- Zool – 3001 Agricultural Entomology

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for BSc Degree

BSc Third Year/ 1st Year Honours

Semester II

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Eng- 3002	English	3	2	2
Zool – 3111/3211	Elementary Physiology	4	3	2
Zool – 3112/3212	Parasitology	4	3	2
Zool – 3113/3213	Entomology	4	3	2
Zool – 3114/3214	Mendelian Genetics	4	3	2
Elective Zool – 3115/3215 Zool – 3116/3216	Toxicology Evolution	3	2	2
	Total	22	16	12

* A student can choose **any one** elective offered to fulfill a **total of 22 credit points**.

Foundation course

- Eng – 3002 (3) (2-2) English

Core courses

- Zool – 3111/3211 (4) (3-2) Elementary Physiology
- Zool – 3112/3212 (4) (3-2) Parasitology
- Zool – 3113/3213 (4) (3-2) Entomology
- Zool – 3114/3214 (4) (3-2) Mendelian Genetics

Elective courses

- Zool – 3115/3215 (3) (2-2) Toxicology
- Zool – 3116/3216 (3) (2-2) Evolution

Elective courses for other specialization

- Zool – 3002 Medical Entomology

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for BSc Degree

BSc Fourth Year/ 2nd Year Honours

Semester I

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Eng – 4001	English	3	2	2
Zool – 4101	Molecular Cell Biology	4	3	2
Zool – 4102	Biodiversity and Conservation	4	3	2
Zool – 4103	Environmental Science	4	3	2
Zool – 4104	Inferential Statistics	4	3	2
Elective Zool – 4105 Zool – 4106	Embryology I/ Molecular Genetics	3	2	2
Total		22	16	12

- * A student requires to take **one** elective offered from the Department of Zoology to fulfill a **total of 22 credit points**.

Foundation course

- Eng – 4001 (3) (2-2) English

Core courses

- Zool – 4101 (4) (3-2) Molecular Cell Biology
- Zool – 4102 (4) (3-2) Biodiversity and Conservation
- Zool – 4103 (4) (3-2) Environmental Science
- Zool – 4104 (4) (3-2) Inferential Statistics

Elective course

- Zool – 4105 (3) (2-2) Embryology I
- Zool – 4106 (3) (2-2) Molecular Genetics

Curriculum for BSc Degree

BSc Fourth Year/ 2nd Year Honours

Semester II

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Eng - 4002	English	3	2	2
Zool - 4111	Endocrinology	4	3	2
Zool - 4112	Microbiology	4	3	2
Zool - 4113	Biotechnology	4	3	2
Zool - 4114	Aquaculture	4	3	2
Elective Zool - 4115/ Zool - 4116	Immunology I/ Poultry Science and Management	3	2	2
	Total	22	16	12

- * A student requires to take **one** elective offered from the Department of Zoology to fulfill a **total of 22 credit points**.
- * Term paper/ Project paper must be submitted by each group not more than 10 students group paper presentation must be included.

Foundation course

- Eng - 4002 (3) (2-2) English

Core courses

- Zool - 4111 (4) (3-2) Endocrinology
- Zool - 4112 (4) (3-2) Microbiology
- Zool - 4113 (4) (3-2) Biotechnology
- Zool - 4114 (4) (3-2) Aquaculture

Elective course

- Zool - 4115 (3) (2-2) Immunology
- Zool - 4116 (3) (2-2) Poultry Science and Management

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for BSc (Honours) Degree

BSc (Honours) Third Year/ MSc (Qualifying)

Semester I

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Zool – 5201	Embryology	4	3	2
Zool – 5202	Endocrinology	4	3	2
Zool – 5203	Biodiversity	4	3	2
Zool – 5204	Virology and Bacteriology	4	3	2
Zool – 5205	Research Methodology	4	3	2
Zool – 5206	Linkage and Chromosome mapping	4	3	2
	Total	24	18	12

Core courses

- Zool – 5201 (4) (3-2) Embryology
- Zool – 5202 (4) (3-2) Endocrinology
- Zool – 5203 (4) (3-2) Biodiversity
- Zool – 5204 (4) (3-2) Virology and Bacteriology
- Zool – 5205 (4) (3-2) Research Methodology
- Zool – 5206 (4) (3-2) Linkage and Chromosome mapping

DEPARTMENT OF ZOOLOGY
Curriculum for BSc (Honours) Degree

BSc (Honours) Third Year/ MSc (Qualifying)

Semester II

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Zool – 5207	Physiology	4	3	2
Zool – 5208	Immunology	4	3	2
Zool – 5209	Evolution	4	3	2
Zool – 5210	Palaeontology	4	3	2
Zool – 5211	Biotechnology	4	3	2
Zool – 5212	Biometry	4	3	2
	Total	24	18	12

Core courses

- Zool – 5207 (4) (3-2) Physiology
- Zool – 5208 (4) (3-2) Immunology
- Zool – 5209 (4) (3-2) Evolution
- Zool – 5210 (4) (3-2) Palaeontology
- Zool – 5211 (4) (3-2) Biotechnology
- Zool – 5212 (4) (3-2) Biometry

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for MSc (Zoology)

MSc (First Year)

Semester I

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Zool – 611	Zoological Nomenclature and Postgraduate Study in the Biological Science	4	4	2
Zool – 612	Zoogeography and Ecology	4	4	2
Zool – 613	Quantitative and Population Genetics	4	4	2
Zool – 614	Developmental Biology	4	4	2
	Total	16	16	8

Core courses

- Zool – 611 (4) (4-2) Zoological Nomenclature and Postgraduate Study in the Biological Science
- Zool – 612 (4) (4-2) Zoogeography and Ecology
- Zool – 613 (4) (4-2) Quantitative and Population Genetics
- Zool – 614 (4) (4-2) Developmental Biology

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for MSc (Zoology)

MSc (First Year)

Semester II

Module No.	Name of Module	Credit Points	Hours	
			Lecture	Practical/ Tutorial
Zool – 621	Animal Physiology and Endocrinology	4	4	2
Zool – 622	Environmental Studies and Conservation Management	4	4	2
Zool – 623	Evolutionary Biology and Animal Behaviour	4	4	2
Zool – 624	Invertebrate Immunology	4	4	2
	Total	16	16	8

Core courses

- Zool – 621 (4) (4-2) Animal Physiology and Endocrinology
- Zool – 622 (4) (4-2) Environmental Studies and Conservation Management
- Zool – 623 (4) (4-2) Evolutionary Biology and Animal Behaviour
- Zool – 624 (4) (4-2) Invertebrate Immunology

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for MSc Course
MSc (Second Year) Semester I

Requirement	Types of requirement	Credit Units
Zool 631 Research Activities I	Proposal Submission	4
Zool 632 Research Activities II	Research Outline and Presentation (Title Defense)	4
Zool 633 Research Activities III	Seminar for Research Data as First Seminar	4
Zool 634 Research Activities IV	Research Progress Report	4
	Total	16

PYAY UNIVERSITY
DEPARTMENT OF ZOOLOGY
Curriculum for MSc Course
MSc (Second Year) Semester II

Requirement	Types of requirement	Credit Units
Zool 641 Research Activities V	Seminar for Research Data as Second Seminar	8
Zool 642 Research Activities VI	Thesis and Viva Voce	8
	Total	16