

**Bachelor of Science Programme in Conservation Biology
New Programme for 2002**

Programme Curriculum

1.1 Programme Structure

1.1.1 General Education Courses	32	credits	
- Social Sciences	3	credits	
- Humanities		3	credits
- Managements	3	credits	
- Languages and Communications	9	credits	
- Sciences and Mathematics		14	credits
1.1.2 Area of Concentration Courses		91	credits
- Required Courses	82	credits	
- Elective Courses	9	credits	
1.1.3 Free Electives	6	credits	

1.2 Course Curriculum

1.2.1 General Education Courses 32 credits

1.2.1.1 Course Managements	3 credits		
MGID 101 Administration and General Management			3 (3-0)
1.2.1.2 Course Social Sciences	3 credits		
SHSS 145 Integrated Social Science			3 (3-0)
1.2.1.3 Course Humanities	3 credits		
SHHU 123 Integrated Humanities I			3 (3-0)
1.2.1.4 Course Languages and Communications	9 credits		
SCLG 131 Introductory University English I			3 (2-2)
SCLG 132 Introductory University English II			3 (2-2)
SCCS 155 Microcomputer Applications			3 (2-3)
1.2.1.5 Course Sciences and Mathematics	14 credits		
SCPY 151 General Physics I			3 (3-0)
SCPY 110 Physics Laboratory I			1 (0-3)
SCMA 113 Calculus			3 (3-0)
SCMA 114 Ordinary Differential Equations			3 (3-0)
SCMA 150 Introduction to Statistics			2 (2-0)
SCBC 205 Physical Principles in Life Science			2 (2-0)

1.2.2 Area of Concentration Courses 91 credits

1.2.2.1 Required Courses	82 credits		
SCBI 101 Principles of Biology I			3 (3-0)
SCBI 102 Principles of Biology laboratory I			1 (0-3)
SCBI 103 Principles of Biology II			3 (3-0)
SCBI 104 Principles of Biology laboratory II			1 (0-3)
SCBI 209 Genetics and Development			4 (4-0)
SCBI 213 Introduction to Botany			3 (2-3)
SCBI 214 General Zoology			3 (2-3)
SCBI 216 Natural Resources and Environment Conservation			2 (2-0)
SCBI 307 Environmental Science			3 (3-0)
SCBI 308 Principles of Evolution			3 (3-0)
SCBI 314 Biostatistics			3 (3-0)
SCBI 316 Cell Biology			3 (3-0)
SCBI 318 Dendrology			2 (1-3)
SCBI 327 Principles of Animal Physiology			4 (3-3)
SCBI 399 General Ecology			3 (2-3)

SCBI 407	Biodiversity Conservation	4 (3-3)
SCBI 408	Principles of Protected Area Management	3 (3-0)
SCBI 495	Seminar in Conservation Biology I	1 (1-0)
SCBI 496	Seminar in Conservation Biology II	1 (1-0)
SCBI 497	Senior Project in conservation Biology	3 (0-9)
SCBC 203	Basic Biochemistry	3 (3-0)
SCBC 204	Basic Biochemistry Laboratory	1 (0-3)
SCLG 231	Intermediate University English I	3 (2-2)
SCLG 232	Intermediate University English II	3 (2-2)
SCCH 103	General Chemistry I	3 (3-0)
SCCH 104	General chemistry II	3 (3-0)
SCCH 108	Chemistry Laboratory I	1 (0-3)
SCCH 109	Chemistry Laboratory II	1 (0-3)
SCCH 121	Basic Organic Chemistry	3 (3-0)
SCCH 128	Organic Chemistry Laboratory	1 (0-3)
SCPY 120	Physic Laboratory II	1 (0-3)
SCPY 152	General Physics II	3 (3-0)
SCMI 203	Basic Microbiology	3 (2-3)
1.2.2.2 Elective Courses		9 credits
SCBI 331	Plant Ecology	3 (2-3)
SCBI 333	Mammalogy	3 (2-3)
SCBI 334	Wildlife Behavior	3 (2-3)
SCBI 362	Ecology of Water Resources	3 (2-3)
SCBI 395	Plant Taxonomy	3 (2-3)
SCBI 396	Ornithology	3 (2-3)
SCBI 397	Animal Taxonomy	3 (2-3)
SCBI 412	Plant Biogeography	3 (3-0)
SCBI 415	Geographic Information System in Conservation Biology	3 (2-3)
SCBI 416	Zoogeography	3 (3-0)
SCBI 417	Nature Interpretation	3 (2-3)
SCBI 420	General Entomology	3 (2-3)
SCBI 421	Insect Ecology	3 (2-3)
SCBI 422	Forest Inventory Techniques	3 (1-6)
SCBI 423	Techniques in Wildlife Study	3 (1-6)
SCBI 424	Ecotourism Planning and Management	3 (3-0)
SCBI 447	Ecology of Wetlands	3 (2-3)
SCBI 448	Introduction to Forest Management	3 (3-0)
SCBI 449	Herpetology	3 (2-3)
SCBI 464	Ecology of Tropical Forests	3 (2-3)
SCBI 465	Tropical Wildlife Management	3 (2-3)

1.2.3 Free Electives

6 credits

SHED 125	Physical Education Activity – Volleyball	1 (0-2)
SHED 126	Physical Education Activity-Petaunque	1 (0-2)
MSID 101	Music Appreciation	2 (1-2)
MSID 102	Chorus	1 (0-2)
MSID 103	Fundamental of Western Music Ensemble	1 (0-2)
MSID 104	Fundamental of Thai Music Performance	1 (0-2)
SCCS 101	Computer Programming I	3 (2-3)

And other courses should be considered by the co-ordinator of the department.

1.3 Plan of Study

First Academic Year – First Semester		Credit
SCCH 103	General Chemistry I	3 (3-0)
SCCH 108	Chemistry Laboratory I	1 (0-3)
SCPY 151	General Physics I	3 (3-0)
SCPY 110	Physics Laboratory I	1 (0-3)
SCMA 113	Calculus	3 (3-0)
SCBI 101	Principles of Biology I	3 (3-0)
SCBI 102	Principles of Biology Laboratory I	1 (0-3)
SCLG 131	Introductory University English I	3 (2-2)
XXXX xxx	Physical Education or Music	1 (x-x)
Total		19 (14-11)

First Academic Year – Second Semester		Credit
SCCH 104	General Chemistry II	3 (3-0)
SCCH 109	Chemistry Laboratory II	1 (0-3)
SCPY 152	General Physics II	3 (3-0)
SCPY 120	Physics Laboratory II	1 (0-3)
SCMA 114	Ordinary Differential Equations	3 (3-0)
SCBI 103	Principles of Biology II	3 (3-0)
SCBI 104	Principles of Biology Laboratory II	1 (0-3)
SCLG 132	Introductory University English II	3 (2-2)
SHHU 123	Integrated Humanities I	3 (3-0)
Total		21 (17-11)

Second Academic Year – First Semester		Credit
SCMA 150	Introduction to Statistics	2 (2-0)
SCCH 121	Basic Organic Chemistry	3 (3-0)
SCCH 128	Organic Chemistry Laboratory	1 (0-3)
SCBI 209	Genetics and Development	4 (4-0)
SCBC 205	Physical Principles in Life Science	2 (2-0)
SHSS 145	Integrated Social Science	3 (3-0)
SCLG 231	Intermediate University English I	3 (2-3)
Total		18 (16-6)

Second Academic Year – Second Semester		Credit
SCBI 213	Introduction to Botany	3 (2-3)
SCBI 216	Natural Resources and Environment Conservation	2 (2-0)
SCBC 203	Basic Biochemistry	3 (3-0)
SCBC 204	Basic Biochemistry Laboratory	1 (0-3)
SCCS155	Microcomputer Applications	3 (2-3)
MGID 101	Administration and General Management	3 (3-0)
SCLG 232	Intermediate University English II	3 (2-3)
XXXX xxx	Free Electives	2 (x-x)
Total		20 (14-12)

Third Academic Year – First Semester		Credit
SCBI 214	General Zoology	3 (2-3)
SCBI 316	Cell Biology	3 (3-0)
SCBI 327	Principles of Animal Physiology	4 (3-3)
SCBI 307	Environmental Science	3 (3-0)
SCBI 399	General Ecology	3 (2-3)
SCMI 203	Basic Microbiology	3 (2-3)
	Total	19 (15-12)

Third Academic Year – Second Semester		Credit
SCBI 308	Principles of Evolution	3 (3-0)
SCBI 314	Biostatistics	3 (3-0)
SCBI 318	Dendrology	2 (1-3)
SCBI xxx	Electives	3 (x-x)
XXXX xxx	Free Electives	3 (x-x)
	Total	14 (7-3)

Electives for Third Academic Year

Conservation of Plant Resources		Credit
SCBI 331	Plant Ecology	3 (2-3)
SCBI 362	Ecology of Water Resources	3 (2-3)
SCBI 395	Plant Taxonomy	3 (2-3)

Conservation of Animal Resources		Credit
SCBI 333	Mammalogy	3 (2-3)
SCBI 334	Wildlife Behavior	3 (2-3)
SCBI 396	Ornithology	3 (2-3)
SCBI 397	Animal Taxonomy	3 (2-3)

Fourth Academic Year – First Semester		Credit
SCBI 407	Biodiversity Conservation	4 (3-3)
SCBI 408	Principles of Protected Area Management	3 (3-0)
SCBI 495	Seminar In Conservation Biology I	1 (1-0)
SCBI xxx	Electives	3 (x-x)
	Total	11 (7-3)

Fourth Academic Year – Second Semester		Credit
SCBI 496	Seminar in Conservation Biology II	1 (1-0)
SCBI 497	Senior Project in Conservation Biology	3 (0-9)
SCBI xxx	Electives	3 (x-x)
	Total	7 (1-9)

**Electives for Fourth Academic Year
(First Semester)**

Conservation of Plant Resources		Credit
SCBI 412	Plant Biogeography	3 (3-0)
SCBI 415	Geographic Information System in Conservation Biology	3 (2-3)
SCBI 448	Introduction to Forest Mangement	3 (3-0)
SCBI 464	Ecology of Tropical Forests	3 (2-3)
Conservation of Animal Resources		
SCBI 415	Geographic Information System in Conservation Biology	3 (2-3)
SCBI 416	Zoogeography	3 (3-0)
SCBI 420	General Entomology	3 (2-3)
SCBI 449	Herpetology	3 (2-3)

**Electives for Fourth Academic Year
(Second Semester)**

Conservation of Plant Resources		Credit
SCBI 417	Nature Interpretation	3 (2-3)
SCBI 422	Forest Inventory Techniques	3 (1-6)
SCBI 424	Ecotourism Planning and Management	3 (3-0)
SCBI 447	Ecology of Wetlands	3 (2-3)
Conservation of Animal Resources		
SCBI 417	Nature Interpretation	3 (2-3)
SCBI 421	Insect Ecology	3 (2-3)
SCBI 423	Techniques in Wildlife Study	3 (1-6)
SCBI 424	Ecotourism Planning and Management	3 (3-0)
SCBI 465	Tropical Wildlife Management	3 (2-3)