Master Program in Teaching Biology



Research Fields

Plant Science and Technology
Animal Science
Biosystematics
Molecular Biology
Population Genetics
Plant Tissue Culture and Plant Breeding
Microbiology
Ecology and Environmental Science



For more information, please visit the following website. www.biology.science.cmu.ac.th



Master of Science Program in Teaching Biology

Type 2 Degree

CC				
Requirements			36	credits
A. Coursework			24	credits
Graduate Courses		a minimum of	24	credits
1.1 Field of Specia	alization	a minimum of	22	credits
1.1.1 Required	courses		19	credits
202737	Integrated Genetic	CS	3	credits
216703	Multimedia for Te	eaching Biology	2	credits
216704	Preparation of Bio	ology Media	3	credits
216711	Evolution and Bio	diversity	3	credits
216721	Cell Structure and	d Function	3	credits
216781	Biotechnology for	Life	3	credits
216790	Seminar in Biology	y Teaching Technique	es 1	credit
216791	Seminar in Biology	y for Teachers	1	credit
1.1.2 Elective o	courses	a minimum of	3	credits
From th	is list or any grac	luate courses in De	partm	nent of Biology
relating to The	sis with the advisor	's approval.		
216701	Practical Biology 1	l	1	credit
216702	Practical Biology 2	2	1	credit
216741	Animal Structure	and Function	3	credits
216742	Plant Structure ar	nd Function	3	credits
216771	Ecology and Envir	onmental Science	3	credits
1.2 Other courses	(if any)	a maximum of	3	credits
1.2.1 Required	courses		-nor	ne-
1.2.2 Elective o	courses (if any)	a maximum of	3	credits
From this	s list.			
	ts ursework Graduate Courses 1.1 Field of Special 1.1.1 Required 202737 216703 216704 216711 216721 216781 216790 216791 1.1.2 Elective of From the relating to The 216701 216702 216741 216742 216771 1.2 Other courses 1.2.1 Required 1.2.2 Elective of 216741	ursework Graduate Courses 1.1 Field of Specialization 1.1.1 Required courses 202737 Integrated Genetice 216703 Multimedia for Tece 216704 Preparation of Bioce 216711 Evolution and Bioce 216721 Cell Structure and 216781 Biotechnology for 216790 Seminar in Biology 216791 Seminar in Biology 1.1.2 Elective courses From this list or any grader relating to Thesis with the advisor 216701 Practical Biology 2 216702 Practical Biology 2 216741 Animal Structure and 2 216742 Plant S	ts a minimum of a	ts a minimum of 24 a minimum of 25 a minimum of 25 a minimum of 26 a minimum of 26 a minimum of 27 a minimum of 27 a minimum of 28 a minimum of 29 a minimum of 20 a minimum of 30 a minimum o

063710	Analysis of Teaching Methodologies		
	and Classroom Culture	3	credits
063715	Curriculum and Instruction for		
	Promoting Thinking Skills	2	credits
064712	Development of Inquiry Approach		
	and Science Process Skills	2	credits
064715	Science Curriculum Development	2	credits
064723	Leadership and Supervision in Science		
	Education in Schools	2	credits
064725	Local Wisdom Related to Science in		
	Global Society	2	credits
064770	Research in Science Education	2	credits
088700	Foundations of Curriculum and		
	Instructional Development	3	credits
Advanced Undergraduate Courses		-n	one-

B. Thesis

2.

216799 Master's Thesis 12 credits

C. Non-credit Courses

1. Graduate School requirement: -a foreign language-

2. Program requirement -none-

D. Academic Activities

At least 1 master's thesis work or a part of master's thesis work must be published or at least accepted to publish in a national journal listed in TCI Tier 1 database or presented in the international conference with proceedings which have at least one full academic paper and at least 1 main publication of the thesis work must specify the student as the first author with the affiliation of Graduate School, Chiang Mai University.

Note: Course in the field of Specialization are courses in graduate level in Department of Biology.

Type 3

Type 5				
Degree Requirements		a minimum of	36	credits
A. Coursework	a minimum of	30	credits	
1. Graduate Course	S	a minimum of	30	credits
1.1. Field of Spec	cialization	a minimum of	28	credits
1.1.1 Required	l courses		22	credits
202737	Integrated Geneti	CS	3	credits
216703	Multimedia for Te	eaching Biology	2	credits
216704	Preparation of Bio	ology Media	3	credits
216711	Evolution and Bio	odiversity	3	credits
216721	Cell Structure and	d Function	3	credits
216771	Ecology and Envi	ronmental Science	3	credits
216781	Biotechnology for	Life	3	credits
216790	Seminar in Biolog	y Teaching Technique	es 1	credit
216791	Seminar in Biolog	y for Teachers	1	credit
1.1.2 Elective	courses	a minimum of	6	credits
From this list or any graduate courses in Department of Biology				
relating to Independent Study with the advisor's approval.				
216701	Practical Biology	1	1	credit
216702	Practical Biology	2	1	credit
216741	Animal Structure	and Function	3	credits
216742	Plant Structure ar	nd Function	3	credits
1.2 Other course	s (if any)	a maximum of	3	credits
1.2.1 Required	l courses		-nor	ne-
1.2.2 Elective	courses (if any)	a maximum of	3	credits

From this list.

	063703	Innovations in Curriculum and Instruction	credits	
	063710	Analysis of Teaching Methodologies		
		and Classroom Culture	3	credits
	063715	Curriculum and Instruction for		
		Promoting Thinking Skills	2	credits
	064712	Development of Inquiry Approach		
		and Science Process Skills	2	credits
	064715	Science Curriculum Development	2	credits
	064723	Leadership and Supervision in Science		
		Education in Schools	2	credits
	064725	Local Wisdom Related to Science in		
		Global Society	2	credits
	064770	Research in Science Education	2	credits
	088700	Foundations of Curriculum and		
		Instructional Development	3	credits
2.	2. Advanced Undergraduate Courses		-nor	ne-

B. Thesis

216798 Independent Study 6 credits

C. Non-credit Courses

1. Graduate School requirement: - a foreign language -

2. Program requirement -none-

D. Academic activities

At least 1 independent study work or a part of independent study work must be published in CMU Graduate Journal or in other academic publication approved by the field of study and the graduate school and at least 1 main publication of the thesis work must

specify the student as the first author with the affiliation of Graduate School, Chiang Mai University.

E. Comprehensive Examination

Having submitted a request form to the Graduate School, approved by general advisor or major thesis advisor, a student must then complete a comprehensive examination.

Note: Course in the field of Specialization are courses in graduate level in Department of Biology.