



หลักสูตรวิทยาศาสตรมหาบัณฑิต
สาขาวิชาอนามัยโรงเรียน
(หลักสูตรนานาชาติ)

MASTER OF SCIENCE PROGRAM
IN
SCHOOL HEALTH
(*INTERNATIONAL PROGRAM*)

FACULTY OF TROPICAL MEDICINE
AND
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY

REVISED PROGRAM ACADEMIC YEAR 2020

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**Master of Science Program in School Health
(International Program)
Revised Program Academic Year 2020**

Name of Institution Mahidol University
Campus/Faculty/Department Faculty of Tropical Medicine

Section 1 General Information

1. Curriculum name

Thai : หลักสูตรวิทยาศาสตรมหาบัณฑิต สาขาวิชาอนามัยโรงเรียน (หลักสูตรนานาชาติ)
English : Master of Science Program in School Health (International Program)

2. Name of degree

Thai	Full name	:	วิทยาศาสตรมหาบัณฑิต (อนามัยโรงเรียน)
	Abbreviation	:	วท.ม. (อนามัยโรงเรียน)
English	Full name	:	Master of Science (School Health)
	Abbreviation	:	M.Sc. (School Health)

3. Major Subject : none

4. Required Credits : not less than 36 credits

5. Curriculum characteristics

- | | | |
|--|---|---|
| 5.1 Curriculum type/model | : | Master degree program |
| 5.2 Language | : | English |
| 5.3 Recruitment | : | Thai and foreign students |
| 5.4 Cooperation with Other Universities | : | This program is Mahidol University's program. |
| 5.5 Degrees offered to graduates | : | One degree of one major |

6. Curriculum status and curriculum approval

- 6.1 Program was revised in 2019 (B.E. 2562)
- 6.2 Starting in semester semester 1, academic year 2020 onwards
- 6.3 Curriculum committee approved the program in its meeting 7/2019 on July 22, 2019
and 11/2019 on October 28, 2019
- 6.4 The Mahidol University Council approved the program in its meeting 552 on January 15, 2020

The Mahidol University Council has approved the adjusted program in its 552nd meeting on January 15, 2020

7. Readiness to implement/promote the curriculum

The curriculum from the program is readily implemented or promoted its quality and standard according to criteria set by Thai Qualification Framework for Higher Education in academic year 2021 (one year after implementation)

8. Career opportunities of the graduates

8.1 School health staff

8.2 School health specialist

8.3 School health researcher

8.4 School health consultant

8.5 School health organizer

9. Name-Surname, I.D. number, title and degree of the person in charge of the curriculum

Number	ID number Academic position Name-Surname	Degree (Field of study) University : Year of graduation	Department
1	XXXXX XXXXX XX X Associate Professor Dr. Suwalee Worakhunpiset	Ph.D. (Tropical Medicine), Mahidol University: 2004 M.Sc. (Technology of Environmental Management), Mahidol University: 1996 B.N.S., Mahidol University: 1991	Social and Environmental Medicine
2	XXXXX XXXXX XX X Assistant Professor Dr. Dumrongkiet Arthan	Ph.D. (Biochemistry), Mahidol University: 2003 M.Sc. (Biochemistry), Mahidol University: 1996 B.Sc. (Biochemistry), Chulalongkorn University : 1992	Tropical Nutrition and Food Science
3	XXXXX XXXXX XX X Assistant Professor Dr. Supaluk Popruk	Ph.D. (Tropical Medicine) Mahidol University: 2007 B.Sc. (Medical Technology), Naresuan University: 2001	Protozoology

10. Venue to conduct the study

Faculty of Tropical Medicine, Mahidol University

11. External factors or developments needed to be considered in curriculum planning

11.1 Economic Situation/Development

Like other countries in the world, Thailand is becoming an aging society, with approximately 20% of the population in 2019 being elderly (aged 60 years and older) making the estimation that a working age person must take care of two elderly people. This is considered to be a heavy burden for this group of people. Therefore, all countries urgently requires a new generation of high quality children. Good health of children is essential for their learning and cognitive ability. Ensuring good health when children are of school age can boost attendance and educational achievement as well as complete both physical, mental, and emotional, and intelligent health.

In the past decades of the emergence of the boundless world, there were dramatic changes in environmental, economic, political, social and cultural situations. The results show great changes in Thai people's daily lives for rapid absorbing messages and foreign cultures which lead to various kinds of problems such as sexual risk of inappropriate period of intercourse caused of teenage-pregnancy, junk food consumption with over high energy caused malnutrition with the lack of proper exercise.

The 11th National Economic and Social Development Plan (NESDB) has the concept of continuity with those of 8th- 10th NESDB restricted with the Sufficiency Economy Philosophy and aimed at humans as the center of development and construction of balancing development in all dimensions. This will reassure that the development is in the sustainable direction and construction of happiness among Thai people.

Under vision of Thailand beyond 2027 with the consideration of the context of future changes in all sectors in Thai society as follows. "Thai people are proud of being Thai, friendship on the way of life with the sufficiency economic norm, culture, democracy and justice. The basic public services with good governance are covered all. The safe and secure society is constantly expected in good atmosphere to help and support each other. The productive system is ecofriendly to the environment with the food and energy security and the economy is self-reliant and competes in the world trade arena. Thai people can live in the region of the world with dignity"

For developing countries particularly in Asia, schoolchildren are now facing many treats including malnutrition, clean environments, lack of sanitation and hygiene and lack of school management. In addition, a teacher is often assigned from school director or school principal to take care of school health. However, there are no teacher who are expert in school health. The school health program would be an important way to make these teachers to have school health knowledge to implement in their schools.

11.2 Social and Cultural Situation/Development

The informative technology is revolutionized and rapidly connected throughout the world. The information is mostly from the western countries so there are rapid changes in social, culture, economy and environment owing to the endless consumption of western information, goods, services and culture leading to the affects on the development of the country in the future. Nowadays, the era of technology and globalization has made the travel abroad more convenient and rapid. Hence, there are more outbreaks of diseases particularly the occurrence of emerging diseases. In order to prepare the society and the country's economy in advance to reach quality according to the impact of change. Therefore, the Master of Science Program (School Health) is served the **NESDB** to produce graduates in the field of school health in order to improve the health hygiene among schoolchildren and youth for a qualified growth. Children and youth become the most important drivers in developing countries around the world in the future.

Therefore, it is necessary to focus on the development of children and youth to be complete in terms of physical, mental, spiritual and moral situations for happily lives in society. Health care from the start is so important to enhance the health of people in excellent physical, mental, social and spiritual situations. There are some words that the education and health are like the front and the back of a coin, there will be no one side either. The school is a basic social institution that has the duty to develop children and youth to have knowledge and potential to cultivate health knowledge and health attitude. This will result in strong health then children and youth can study completely and grow in quality to become potential adults for developing country later.

In Thailand and other ASEAN countries, a teacher has usually been assigned from school director or school principal to take care of school health. In fact, each primary school must have the real position school health teachers who must graduate in the field of school health rather than in other fields and training as a school health teacher. As a results, most school health teachers lack knowledge and understanding about choosing the appropriate health assessment for school children and they have less experience to work in school health service. Therefore, the teachers or any organizations related to child are required to be trained school health short courses or study Master of Science in school health program so that they perform an exact role in school health management including health education and health promotion for school children.

12. The Effects Mentioned in No.11.1 and 11.2 on Curriculum Development and Relevance to the Missions of the University

12.1 Curriculum Development

As mentioned above, school health teachers have usually lacked knowledge and understanding about choosing the appropriate health assessment for school children and have less experience to work in school health service. Therefore, to fill the gap, the school health program have been established to provide the students for health promoting school including school policies, healthy school environment, school health service, school organization counseling/social support, school health education, school/community projects, nutrition/food safety physical exercise, sport, and recreation, and health promotion for staffs. The program also conducted a survey among potential students and employers in August 2017. The survey participants are those who work related to school health, including teachers and school-related public health officers of the Ministry of Public Health Thailand, and other private sectors. For potential students, about 90% of them were interested to postgraduate study. Master degree is the most preferable program for pursuing the study. Presently, the trend of attending international courses rises among Thai and global societies. It is the market demand of academic graduates with the government policy to drive Thailand to be the academic center of Asia (Educational Hub). The competencies of graduate that both potential students and employers would like to have most are: being able to manage, promote, educate health for the children that fit with school needs, being responsible and devote to the task given, being discipline and having ethical consideration, satisfaction with the career path and position, being able to communicate and work with others.

According to evaluations of the students in every year, they suggested that the course for the continuation of the course in order to know how to cope with school health problems and protect schoolchildren from hazardous factors. However, it seems practical in the real situation like field trip study is very impact and useful for students. The program also conducted a survey among alumni and employers in October 2018. On average, present international students and alumni gave the program an average score of 8.5 and 8.6 respectively (on the scale of 1– 10 of the program satisfaction). These results means students are very satisfied with their study experience in school health program.

12.2 Relevance to the Missions of the University

The international course of Master of Science (School Health) is directly related to the mission of the Faculty of Tropical Medicine and Mahidol University in health science which the graduates will learn and understand important diseases among schoolchildren, health promotion and school hygiene, environmental management including knowledge of research. For one component in driving health national policy corresponded with the vision of the Faculty to establish the international program in school health and to formulate a strategic leadership approach to international excellence in research, teaching, academic and health services for a better quality of life of people in tropical regions and for strengthenness of health development among youth and children in physical and spiritual excellences which are the important factors for Thai society and humanity.

13. Cooperation with Other Curricula of the University

This curriculum supports the mission of the university on the part of excellence in school health to benefit of mankind particularly school children. The program is designed to integrate health knowledge and practices to school or any organizations related to child, in which the graduates will be able to apply their knowledge and skills to develop innovations to improve health practices in school, any organizations and country.

13.1 Course offered by other faculties/departments /programs:

Courses offered to other programs are as follow:

Course code	Course title	Credit
Required courses		
TMID 544	Research Methodology	2 (2-0-4)
Elective courses		
TMSE 524	Principles of Environmental Health and Toxicology	2 (2-0-4)
TMSE 528	Environmental Management	2 (2-0-4)
TMHG 549	Application Of Geographical Information System (Gis) in Epidemiology	2 (1-2-3)
TMCD 519	AIDS	2 (2-0-4)
TMNU 506	Nutrition	2 (2-0-4)

13.2 Courses offered to other programs: None

Courses offered to other programs are as follow:

Course code	Course title	Credit
Elective courses		
*TMSH 518	Instructional Media Design for School Health Promotions	2 (1-2-3)

13.3 Coordination:

The curriculum management emphasizes on collaborating with course instructors regularly; hence, meeting among instructors is not only a formal meeting, yet it requires another preparation meeting to know the curriculum management and current circumstance, including teaching schedules before proposing the agenda of the next meeting. In addition, the other issues of the important program management and the class schedule is coordinated with the faculty staffs regularly to obtain appropriate schedules which suited to the purpose of the course management, which is considered the readiness from various parts to achieve the ultimate goal of the program.

Section 2 Information of the Curriculum

1. Philosophy, Justification, and Objectives of the Curriculum

1.1 Philosophy and Justification of the Curriculum

1.1.1 Philosophy of Program

The Master of Science Program in School Health (International Program) aims to train graduate students to become proficient and skillful in school health, cultivate attitudes and skills in both fundamental and researches being conducted with responsibilities and consideration on rights of research participants in line with widely recognized ethical standards for research.

1.1.2 Significance of Program

Currently, health problems in school and nearby community have rapidly progressed and developed. The school health Program aims to promote the development of healthy and prevent important health risks among children and adolescents to engage the education sector. The program prepares graduates equipped with knowledge and skills in school health, health promotion in school setting, school management.

1.2 Objectives of the Program:

By the end of the study, the graduates will have qualifications according to Thai Qualifications Framework for Higher Education as shown below.

1.2.1 Demonstrate integrity, good moral and self-sacrifice for the welfare of the school community.

1.2.2 Demonstrate competency in current contents of school health knowledge.

1.2.3 Apply knowledge gained and skills in recognizing problems, and plan, implement, manage and evaluate the impact of school health development projects.

1.2.4 Work cooperatively with leadership and high responsibility for assigned work.

1.2.5 Apply statistic analytical thinking and information technology to search for work, communication and presentation effectively.

1.3 Program Learning Outcomes (PLOs)

PLO1 Demonstrate moral and ethical manners in school-health-based research.

PLO2 Describe comprehensive knowledge of school health.

PLO3 Apply knowledge gained and skills in health promotion, health prevention, health education, and health management, to solve health problems in schools and communities.

PLO4 Facilitate either as leaders or followers to complete the collaborative works

PLO5 Apply appropriate scientific methods including statistical methods and information technology in school health.

2. Plan for Development and Improvement

Plan for Development/Revision	Strategies	Evidences/Indexes
1. Major revision every five years based on the policy of Thai Office of Commission of Higher Education	<ul style="list-style-type: none"> • SWOT and stakeholder needs analysis 	1. SWOT result 2. Revised curriculum report
2. Enhance teaching skills and course management skills of lecturers and staff.	<ul style="list-style-type: none"> • Provide/support training in teaching and evaluation. 	1. Conducting of staff training 2. Having of staffs receiveing trainings 3. Teaching evaluation report

Section 3 Educational Management System, Curriculum Implementation, and Structure

1. Educational Management System

1.1 System: Two Semester Credit system. 1 Academic Year consists of 2 Regular Semesters, each with not less than 15 weeks of study

1.2 Summer Session: There is a 6 week Summer Semester in year 2, or as considered by the Curriculum Committee.

1.1 Credit Equivalence to Semester System: N/A

2. Curriculum Implementation

2.1 Teaching Schedule: Weekdays from Monday to Friday (8:00-16:30)

First Semester : August - December

Second Semester : January – May

Summer Semester : May - July

2.2 Qualifications of Prospective Students for Plan A(2) and Plan B)

2.2.1 Holding a Bachelor degree in either Sciences, Education or Arts, from Higher education institution which it is accredited by office of the Higher Education Commission

2.2.2 Having an cumulative GPA not less than 2.5

2.2.3 Having an English Proficiency Examination score as the requirement of Faculty of Graduate Studies

2.2.4 Other exceptions may be considered by the Program Director and the Dean of the Faculty of Graduate Studies

2.3 Problems of New Students Encounter

2.3.1 Students from non-native English speaking countries with unsatisfied English proficiency may encounter the problem during teaching and learning activities, writing thesis/thematic paper.

2.3.2 Students with variety of educational background may have difficulties in achieving PLOs particularly PLOs 2 and 3.

2.4 Strategies for Problem Solving/Limited Requirement in No.2.3

Problems of New Students	Strategies for Problem Solving
1. Students from non-native English speaking countries with unsatisfied English proficiency may encounter the problem during teaching and learning activities, writing thesis/thematic paper.	1. Students who could not pass the satisfaction English proficiency test must attend extra English course.
2. Students with variety of educational background may have difficulties in achieving PLOs particularly PLOs 2 and 3.	2. The Program provide extra class for any students who have low examination scores to adjust the knowledge for general health science and statistics for the first semester of the first academic year.

2.5 Five-Year-Plan for Recruitment and Graduation of Students

2.5.1 Plan A2

Year of Study	2020	2021	2022	2023	2024
1 st	4	4	4	4	4
2 nd		4	4	4	4
Cumulative number	4	8	8	8	8
Expected number of students graduation	-	4	4	4	4

2.5.2 Plan B

Year of Study	2020	2021	2022	2023	2024
1 st	4	4	4	4	4
Cumulative number	-	-	-	-	-
Expected number of students graduation	4	4	4	4	4

2.6 Budget based on the plan

Budget: The budget is from Faculty of Tropical Medicine, Mahidol University

	Plan A2	Plan B
Estimate income per student		
Registration fee		
Tuition	xxx,xxx	xxx,xxx
Thesis/thematic paper registration fee	xx,xxx	xx,xxx
Research supplies fee	xx,xxx	xx,xxx
Program fee	xx,xxx	xx,xxx
Field Trip expenses (TMSH 505)	x,xxx	x,xxx
Total income per student	xxx,xxx	xxx,xxx
Estimated expenses		
Variable expenses per student		
Overhead cost for Faculty of Graduate Studies and University	xx,xxx	xx,xxx
Position allowance of thesis advisor and committee	xx,xxx	xx,xxx
Total variable expenses per student	xx,xxx	xx,xxx
Fixed expenses		
Staff salary	xx,xxx	xx,xxx
Teaching payment	xxx,xxx	xxx,xxx
Guest lecturers	xx,xxx	xx,xxx
Utility fee	xx,xxx	xx,xxx
Material fee	xx,xxx	xx,xxx
Equipment fee	xx,xxx	xx,xxx
Total fixed expenses	xxx,xxx	xxx,xxx
Number of students at break-even point	3	3
Cost of students at break-even point	614,300	231,167
Expenses per student per academic year	307,150	231,167

*Both plans use shared resourced at concurrent period, therefore the break-even point will be the maximum break-even between both plans in which at least 3 students are required each year for the whole program (as shown in table 2.5)

2.7 Educational System: Classroom Mode

2.8 Transfer of Credits, Courses and Cross University Registration

Credits transferring must be in compliance with Mahidol University's regulations on Graduate Studies. More information can be found at www.grad.mahidol.ac.th.

3. Curriculum and Instructors

3.1 Curriculum

3.1.1 Number of credits (not less than) 36 credits

3.1.2 Curriculum Structure

The curriculum structure is set in compliance with Announcement of Ministry of Education on the subject of Criteria and Standards of Graduate Studies B.E. 2558, Master Degree, Plan A2 and Plan B as below:

	Plan A 2	Plan B
1) Required courses	20	20
2) Elective courses not less than	4	10
3) Thesis	12	-
4) Thematic Paper	-	6
Total not less than	36	36

3.1.3 Courses in the curriculum

1) Required Courses : Plan A2 20 Credits
: Plan B 20 Credits

Credits (lecture – practice – self-study)

TMSH	502	Diseases in School Children	3 (2-2-5)
วขอร	๕๐๒	โรคที่เกิดกับเด็กวัยเรียน	
TMSH	503	School Environment Management	2 (2-0-4)
วขอร	๕๐๓	การจัดการสิ่งแวดล้อมโรงเรียน	
TMSH	504	School Health Development	2 (1-2-3)
วขอร	๕๐๔	การพัฒนาอนามัยโรงเรียน	
TMSH	505	School Health Management	2 (0-4-2)
วขอร	๕๐๕	การจัดการอนามัยโรงเรียน	
TMSH	512	Health Issues in Schools	3 (3-0-6)
วขอร	๕๑๒	ประเด็นสุขภาพในโรงเรียน	
TMSH	513	Nutrition Principles for School Children	2 (2-0-4)
วขอร	๕๑๓	หลักโภชนาศาสตร์สำหรับเด็กวัยเรียน	
TMSH	514	School Health Seminars	2 (2-0-4)
วขอร	๕๑๔	สัมมนาอนามัยโรงเรียน	
*TMSH	515	Epidemiology and Biostatistics in School Health	2 (2-0-4)
วขอร	๕๑๕	ระบาดวิทยาและชีวสถิติทางอนามัยโรงเรียน	
TMID	544	Research Methodology	2 (2-0-4)
วขสว	๕๔๔	วิทยาระเบียบวิธีวิจัย	

*** New Course**

2) Elective Courses

Plan A2 : not less than 4 Credits

Plan B : not less than 10 Credits

			Credits (lecture – practice – self-study)
TMSH	511	Special Topics in School-Health Based Research	2 (2-0-4)
วขอร	๕๑๑	หัวข้อพิเศษการวิจัยบนพื้นฐานของอนามัยโรงเรียน	
TMSH	516	Food for School Children	2 (2-0-4)
วขอร	๕๑๖	อาหารสำหรับเด็กวัยเรียน	
TMSH	517	Health Behaviors of School Children	2 (2-0-4)
วขอร	๕๑๗	พฤติกรรมสุขภาพของเด็กวัยเรียน	
* TMSH	518	Instructional Media Design for School Health Promotions	2 (1-2-3)
วขอร	๕๑๘	การออกแบบสื่อการสอนเพื่อการส่งเสริมอนามัยโรงเรียน	
TMSE	524	Principles of Environmental Health and Toxicology	2 (2-0-4)
วขอส	๕๒๔	หลักการทางสุขภาพสิ่งแวดล้อมและพิษวิทยา	
TMSE	528	Environmental Management	2 (2-0-4)
วขอส	๕๒๘	การจัดการสิ่งแวดล้อม	
TMHG	549	Application of Geographical Information System (GIS) in Epidemiology	2 (1-2-3)
วขสข	๕๔๙	การประยุกต์ระบบสารสนเทศภูมิศาสตร์ในวิทยาการระบาด	
TMCD	519	AIDS	2 (2-0-4)
วขอข	๕๑๙	โรคเอดส์	
TMNU	506	Nutrition	2 (2-0-4)
วขกร	๕๐๖	โภชนศาสตร์	

*** New Course**

In addition to elective courses mentioned above, a student may register other courses in international Program offered by other faculties or the ones offered by other universities according to the student's interest with the approval of the curriculum committee or the advisor.

3) Thesis (for Plan A2)**Credits (lecture – practice – self-study)**

TMSH 698 Thesis

12 (0-36-0)

วทอช ๖๙๘ วิทยานิพนธ์

4) Thematic paper (for Plan B)**Credits (lecture – practice – self-study)**

TMSH 697 Thematic Paper

6 (0-18-0)

วทอช ๖๙๗ สารนิพนธ์

3.1.4 Research Project of the Program (for a Master's degree : Plan A2 and Plan B)

Guidelines for conducting a research project are as follows:

- Health status of school children
- Nutrition in school children
- School hygiene
- Disease prevention and control in schools
- Environmental health in schools
- Development of instructional media for school health
- Mental health in school children

3.1.6 Definition of Course Codes

Four main alphabets are defined as follows:

The first two alphabets are abbreviation of the faculty offering the course.

TM means Faculty of Tropical Medicine

The latter two alphabets are abbreviation of the department or the major offering the course.

ID means Interdepartment

SH means School health program

SE means Department of Social and Environmental Medicine

HG means Department of Tropical Hygiene

CD means Department of Clinical Tropical Medicine

NU means Department of Tropical Nutrition and Food Science

3 digits of number are 5XX and 6XX indicate that the courses are in the graduate study

3.1.7 Study Plan

Plan A2

Year	Semester 1	Semester 2
1	TMSH 502 Diseases in School Children 3 (2-2-5) TMSH 503 School Environment Management 2 (2-0-4) TMSH 504 School Health Development 2 (1-2-3) TMSH 513 Nutrition Principles for School Children 2 (2-0-4) TMSH 515 Epidemiology and Biostatistics in School Health 2 (2-0-4) TMID 544 Research Methodology 2 (2-0-4) TMSH 505 School Health Management 2 (0-4-2) Total 15 credits	TMSH 512 Health Issues in Schools 3 (3-0-6) TMSH 514 School Health Seminars 2 (2-0-4) Elective course not less than 4 credits Total 9 credits
2	TMSH 698 Thesis 6 (0-18-0) Total 6 credits	TMSH 698 Thesis 6 (0-18-0) Total 6 credits

Year	Semester 1	Semester 2
1	<p>TMSH 502 Diseases in School Children 3 (2-2-5)</p> <p>TMSH 503 School Environment Management 2 (2-0-4)</p> <p>TMSH 504 School Health Development 2 (1-2-3)</p> <p>TMSH 506 Nutrition Principles for School Children 2 (2-0-4)</p> <p>TMSH 515 Epidemiology and Biostatistics in School Health 2 (2-0-4)</p> <p>TMID 544 Research Methodology 2 (2-0-4)</p> <p>TMSH 505 School Health Management 2 (0-4-2)</p> <p>Total 15 credits</p>	<p>TMSH 512 Health Issues in Schools 3 (3-0-6)</p> <p>TMSH 514 School Health Seminars 2 (2-0-4)</p> <p>Elective course not less than 10 credits</p> <p>(Comprehensive exam)</p> <p>Total 15 credits</p>
Summer		
<p>TMSH 697 Thematic paper 6 (0-18-0)</p> <p>Total 6 credits</p>		

Please see Appendix A.

3.2.1 Full time instructors of the curriculum (Please see Appendix B)

Number	ID number Academic position Name-Surname	Degree (Field of study) University : Year of graduation	Department
1.	XXXXX XXXXX XX X Professor Dr.Rungsun Tungtrongchitr	Ph.D. (Tropical Medicine), Mahidol University: 1988 M.Sc. (Tropical Medicine), Mahidol University: 1981 B.Sc. (Medical Technology), Mahidol Univesity: 1978	Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine
2.	XXXXX XXXXX XX X Associate Professor Dr. Aongart Mahittikorn	Ph.D. (Tropical Medicine), Mahidol University: 2009 B.Sc. (Public Health) (Hons.), Mahidol University: 2003	Department of Protozoology, Faculty of Tropical Medicine

Number	ID number Academic position Name-Surname	Degree (Field of study) University : Year of graduation	Department
3.	XXXXX XXXXX XX X Associate Professor Chukiat Sirivichayakul	Dip. Thai Board of Pediatrics Thai Medical Council: 1991 Dip. Thai Board of Tropical Medicine and Hygiene Mahidol University: 1997 M.D., Chulalongkorn University: 1985	Department of Tropical Pediatric, Faculty of Tropical Medicine
4.	XXXXX XXXXX XX X Associate Professor Dr. Direk Limmathurotsakul	Ph.D. (Life and Biomolecular Sciences), Open University, UK: 2009 M.Sc. (Medical Statistics), London School of Hygiene and Tropical Medicine, UK: 2008 M.D. Chulalongkorn University: 2000	Department of Tropical Hygiene, Faculty of Tropical Medicine
5.	XXXXX XXXXX XX X Associate Professor Dr. Dorn Wattanakulpanich	Ph.D. (Biomolecular Sciences), Liverpool John Moores University, UK: 2009 M.D., Mahidol University: 2002 M.Sc. (Tropical Medicine), Mahidol University: 1995 B.Sc. (Medical Technology), Chiangmai University: 1988	Department of Helminthology, Faculty of Tropical Medicine
6.	XXXXX XXXXX XX X Associate Professor Dr. Karunee Kwanbunjan	Dr. oec. troph. (Nutrition and Food Sciences) Justus Liebig University, Germany: 1996 M.Sc. (Tropical Medicine), Mahidol University: 1984 B.Sc. (Biology), Kasetsart University: 1981	Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine
7.	XXXXX XXXXX XX X Associate Professor Dr. Kraichat Tantrakarnapa	Ph.D. (Environmental Engineering), Suranaree University of Technology: 2003 M.Sc. (Technology of Environmental Management), Mahidol University: 1990 B.S.(Statistics), Chiangmai University: 1985	Department of Social and Environmental Medicine, Faculty of Tropical Medicine

Number	ID number Academic position Name-Surname	Degree (Field of study) University : Year of graduation	Department
8.	XXXXX XXXXX XX X Associate Professor Kriengsak Limkittikul	Dip. Thai Board of Tropical Medicine and Hygiene Mahidol University: 2006 Dip. Thai Board of Family Medicine Thai Medical Council: 2003 Diploma of Virology Nagasaki University, JAPAN: 2001 Diploma Thai Board of Pediatrics Khonkaen University : 1999 M.D., Mahidol University: 1995	Department of Tropical Pediatric, Faculty of Tropical Medicine
9.	XXXXX XXXXX XX X Associate Professor Dr. Paron Dekumyoy	Ph.D. (Tropical Medicine), Mahidol University: 2003 M.Sc. (Tropical Medicine), Mahidol University: 1985 B.Sc. (Biology), Ramkhamhaeng University: 1980	Department of Helminthology, Faculty of Tropical Medicine
10.	XXXXX XXXXX XX X Associate Professor Dr. Suwalee Worakhunpiset	Ph.D. (Tropical Medicine), Mahidol University: 2004 M.Sc. (Technology of Environmental Management), Mahidol University: 1996 B.N.S. (Nursing), Mahidol University: 1991	Department of Social and Environmental Medicine, Faculty of Tropical Medicine
11.	XXXXX XXXXX XX X Associate Professor Dr. Thareerat Kalambaheti	Ph.D. (Microbiology) Monash University, Australia: 2000 M.Sc. (Microbiology) University of New South Wales, Australia : 1991 B.Sc. (Microbiology), Chulalongkorn University: 1982	Department of Microbiology and Immunology, Faculty of Tropical Medicine
12.	XXXXX XXXXX XX X Assistant Professor Dr. Dumrongkiet Arthan	Ph.D. (Biochemistry), Mahidol University: 2003 M.Sc. (Biochemistry), Mahidol University: 1996 B.Sc. (Biochemistry), Chulalongkorn University: 1992	Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine

The Mahidol University Council has approved the adjusted program in its 552nd meeting on January 15 , 2020

Number	ID number Academic position Name-Surname	Degree (Field of study) University : Year of graduation	Department
13.	XXXXXX XXXXX XX X Assistant Professor Dr. Jittima Dhitavat	Dip. Thai Board of Epidemiology (Travel Medicine) Thai Medical Council: 2013 D.Phil. (Clinical Medicine), University of Oxford, UK: 2003 Dip. Thai Board of Dermatology Thai Medical Council: 1995 M.Sc. (Internal Medicine), Chulalongkorn University: 1992 M.D. (Honors), Prince of Songkla University: 1989	Department of Clinical Tropical Medicine, Faculty of Tropical Medicine
14.	XXXXXX XXXXX XX X Assistant Professor Dr. Kobporn Boonnak	Ph.D. (Microbiology), Mahidol University: 2008 M.Sc. (Immunology), Mahidol University: 2000 B.Sc. (Biochemistry and Biochemical Technology) ChiangMai University: 1996	Department of Microbiology and Immunology, Faculty of Tropical Medicine
15.	XXXXXX XXXXX XX X Assistant Professor Dr. Ngamphol Soontornworasiri	Ph.D. (Mathematics), Mahidol University: 2008 M.Sc. (Applied Mathematics), Mahidol University: 2003 B.Sc. (Mathematics), Mahidol University: 2000	Department of Tropical Hygiene, Faculty of Tropical Medicine
16.	XXXXXX XXXXX XX X Assistant Professor Dr. Pattaneeya Prangthip	Ph.D. (Nutrition), Mahidol University: 2012 M.Sc. (Food Technology), University of New South Wales, Australia: 2004 B.Sc. (Biotechnology), Silapakorn University: 2001	Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine

Number	ID number Academic position Name-Surname	Degree (Field of study) University : Year of graduation	Department
17.	XXXXX XXXXX XX X Assistant Professor Dr. Saranath Lawpoolsri Niyom	Ph.D. (Epidemiology), University of Maryland, Baltimore, USA: 2009 Diploma in Tropical Medicine and Hygiene, Mahidol University: 2003 M.D. (2 nd class honors), Chulalongkorn University: 2000	Department of Tropical Hygiene, Faculty of Tropical Medicine
18.	XXXXX XXXXX XX X Assistant Professor Dr. Suchada Sumruayphol	Ph.D. (Tropical Medicine), Mahidol University: 2010 M.Sc. (Appropriate Technology for Resources and Environmental Development), Mahidol University: 2004 B.Sc. (Agriculture), Kasetsart University: 2000	Department of Medical Entomology, Faculty of Tropical Medicine
19.	XXXXX XXXXX XX X Assistant Professor Dr. Supaluk Popruk	Ph.D. (Tropical Medicine), Mahidol University: 2007 B.Sc. (Medical Technology), Naresuan University: 2001	Department Protozoology, Faculty Tropical Medicine
20.	XXXXX XXXXX XX X Assistant Professor Dr. Supawat Chatchen	Ph.D. (Molecular Genetics and Genetic Engineering) Mahidol University: 2005 Dip. Thai Board of Tropical Medicine and Hygiene Mahidol University: 2014 M.D., Mahidol University: 2008 B.Sc. (Medical Science) Mahidol University : 1999	Department of Tropical Pediatric, Faculty of Tropical Medicine
21.	XXXXX XXXXX XX X Assistant Professor Weerawan Hattasingh	Dip. Thai Board of (Pediatric in Infectious Diseases) Thai Medical Council: 2009 Dip. Thai Board of (Pediatrics) Thai Medical Council: 2002 Dip. Thai Board of (Tropical Medicine and Hygiene) Mahidol University:: 2011 M.D., Mahidol University: 1996	Department of Tropical Pediatric, Faculty of Tropical Medicine

The Mahidol University Council has approved the adjusted program in its 552nd meeting on January 15, 2020

Number	ID number Academic position Name-Surname	Degree (Field of study) University : Year of graduation	Department
22.	XXXXXX XXXXX XX X Assistant Professor Dr. Wirichada Pan-ngum	Ph.D. (Infectious Diseases), University of Liverpool, UK: 2007 M.Sc. (Applied Statistics), University of Oxford, UK: 1999 B.Sc. (Mathematics Operational Research, Statistics and Economics), University of Warwick: 1998	Department of Tropical Hygiene, Faculty of Tropical Medicine
23.	XXXXXX XXXXX XX X Assistant Professor Dr. Yanin Limpanont	D.Sc. (Marine life science), Jeju National University, South Korea: 2010 M.S. (Aquatic Animal Disease), Chulalongkorn University: 2004 D.V.M. Chulalongkorn University: 2001	Department of Social and Environmental Medicine, Faculty of Tropical medicine
24.	XXXXXX XXXXX XX X Lecturer Dr. Amornrat Aroonnual	Ph.D. (Biotechnology) Mahidol University: 2006 B.Sc. (Biotechnology) Mahidol University: 2000	Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine
25.	Lecturer Dr. Athit Phetrak	Ph.D. (Environmental Engineering), The University of Tokyo, Japan: 2012 M.Sc. (Environmental Technology and Management), Asian Institute of Technology: 2009 B.Sc. (Public Health), Mahidol University: 2006	Department of Social and Environmental Medicine, Faculty of Tropical Medicine
26.	XXXXXX XXXXX XX X Lecturer Dr. Pannamas Maneeekan	Ph.D. (Tropical Medicine), Mahidol University: 2014 M.Sc. (Community Medicine), Chulalongkorn University: 1997 B.N.S. (Nursing Science), Chonburi Nursing College: 1991	Department of Tropical Hygiene, Faculty of Tropical Medicine

Number	ID number Academic position Name-Surname	Degree (Field of study) University : Year of graduation	Department
27.	XXXXXX XXXXX XX X Lecturer Dr. Pimphen Charoen	Ph.D. (Statistical Genetics) Imperial College London, UK :2014 M.Phil (Statistical Genetics) University of Cambridge, UK :2008 M.Sc. (Applied Mathematics) University of New South Wales, Australia :2005 B.Sc. (Mathematics) Mahidol University: 2002	Department of Tropical Hygiene, Faculty of Tropical Medicine
28.	XXXXXX XXXXX XX X Lecturer Dr. Suparat Phuanukoonnon	Ph.D. (Tropical Health), University of Queensland, Australia 2003 M.H.S. (Environmental Health), Queensland University of Technology, Australia: 1998 B.N.S. (Nursing), Boromarajonani College of Nursing Lampang : 1990	Department of Social and Environmental Medicine, Faculty of Tropical Medicine
29.	XXXXXX XXXXX XX X Lecturer Dr. Sarunya Kaewprasert	Ph.D. (Nutritional Biochemistry) Hokkaido University, Japan: 2002 M.Agr. (Nutritional Biochemistry) Hokkaido University, Japan: 1999 B.Sc. (Biotechnology), Mahidol University: 1997	Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine

3.2.2 Full time instructors

Number	ID number Academic position Name-Surname	Degree (Field of study) University : Year of graduation	Department
1.	XXXXX XXXXX XX X Assistant Professor Dr. Watcharee Arunsodsai	Ph.D. (Infectious & Tropical Diseases) University of London, UK: 2005 Dip. of Infectious Diseases International Medical Center of Japan, Tokyo, Japan: 1998 Dip. Thai Board of (Pediatrics) Thai Medical Council: 1993 Dip. Thai Board of Tropical Medicine and Hygiene, Mahidol University: 1996 M.D., Mahidol University: 1987	Department of Pediatrics, Faculty of Tropical Medicine
2.	XXXXX XXXXX XX X Lecturer Dr. Pornrutsami Jintaridh	Ph.D.(Biochemistry), Mahidol University: 2005 M.Sc. (Nutrition), Mahidol University: 1995 B.Sc. (Nursing), Chulalongkorn University: 1986	Department of Tropical Nutrition & Food Science, Faculty of Tropical Medicine

3.2.3 Part time instructors

Part time instructors will be invited if required.

4. Details of Practicum : None

5. Thesis/Thematic paper requirement

5.1 Thesis requirement

Students in Plan A2 require to complete thesis project as stated in Section 3.1.4 ,Thesis must be complied to the regulations of the Faculty of Graduate Studies, Mahidol University. All research involving human subjects must be approved by the Ethics Committee of the Faculty of Tropical Medicine (FTM-EC).

5.1.1 Short Description

Identifying research topic in school health, developing research proposal related to the topic, planning a research based on a proper research methodology and research ethics, data collection, analysis, interpretation of the results, presenting, writing thesis, and publishing research in a peer-review scientific journal or presenting in the conference with Proceedings.

5.1.2 Standard Learning Outcomes

Students are able to apply knowledge and skills in the field of school health, to develop a proper thesis Students are able to present their thesis to the thesis examination committees, and publish in a peer-review scientific journal or present in the conference with Proceedings.

5.1.3 Time Frame

Plan A2: Semester 1 of academic year 2 until Semester 2 of academic year 2

5.1.4 Number of credits

12 credits for thesis of Plan A2

5.1.5 Preparation

Students develop their thesis under the supervision of thesis major- and co-advisors, appointed by Dean of Faculty of Graduate Studies. The advisor committee contains at least 3 persons, including major advisor, co-advisors who have expertise related to the project. Advising time must be provided including advice from advisors. Students must progress their work to the advisors 3 times per semesters to make sure that the project follow the project timeline.

5.1.6 Evaluation Process

In Plan A2, the research process shall be evaluated by the advisor of student's thesis every time of consultation during conducting the research. The final oral examination is systematically evaluated by the graduate committee following the standards of the Faculty of Graduate Studies, Mahidol University. Students must submit progress report (GR42) to the graduate committee and to the Faculty of Graduate Studies at the end of each semester and submit their complete thesis to the Faculty of Graduate Studies when they pass thesis defense examination.

5.2 Thematic paper requirement

Students in Plan B require to complete thematic paper requirement project as stated in Section 3.1.4 ,Thematic paper must be complied to the regulations of the Faculty of Graduate Studies, Mahidol University. All research involving human subjects must be approved by the Ethics Committee of the Faculty of Tropical Medicine (FTM-EC).

5.2.1 Short Description

Identifying research topic in school health, developing research proposal related to the topic, planning a research based on a proper research methodology and research ethics, data collection, analysis, interpretation of the results, presenting, writing thematic paper.

5.2.2 Standard Learning Outcomes

Students are able to apply knowledge and skills in the field of school health to develop a thematic paper project. Students are able to present to the thematic paper examination committee.

5.2.3 Time Frame

Plan B: Semester 2 of academic year 1

5.2.4 Number of credits

6 credits for thematic paper in Plan B

5.2.5 Preparation

Students develop their thematic papers under the supervision of thematic paper major- and co-advisors, appointed by Dean of Faculty of Graduate Studies. The advisor committee contains at least 3 persons, including major advisor, co-advisors who have expertise related to the project. Advising time must be provided including advice from advisors. Students must progress their work to the advisors at least once a month to make sure that the project follow the project timeline.

5.2.6 Evaluation Process

The students in Plan B must pass a comprehensive examination that focus on the topic of the planned research work of the students and on the knowledge related to Biomedical and Health Informatics.

In Plan B, the research process shall be evaluated by the advisor of student's thematic paper every time of consultation during conducting the research. The final oral examination is systematically evaluated by the graduate committee following the standards of the Faculty of Graduate Studies, Mahidol University. Students must submit progress report (GR42) to the graduate committee and to the Faculty of Graduate Studies at the end of each semester and submit their complete thematic paper to the Faculty of Graduate Studies when they pass thematic defense examination.

Section 4 Learning Outcome, Teaching Strategies and Evaluation

1. Development of Students' Specific Qualifications

Special Characteristics	Teaching Strategies or Student Activities
<p>1. Fulfil the expected outcomes of Mahidol graduates</p> <p>M - Mastery</p> <p>A - Altruism</p> <p>H - Harmony</p> <p>I - Integrity</p> <p>D - Determination</p> <p>O - Originality</p> <p>L - Leadership</p>	<p>Integrate activities promoting these expected outcomes to co-curriculum though these activities arranged by Faculty of Tropical Medicine:</p> <ul style="list-style-type: none"> - Ethics and human research training (attend at least 1 time) - Cultural activities of FTM, including international day, Songkran festival, etc. - Visiting Chitralada Royal Villa for learning sufficient economic philosophy of King Rama IX (attend at least 1 time) - Extra class for Thai language (attend at least 3 times) - Academic Forum held once a year (attend at least 1 time) - Soft skills activities e.g. EndNote training (at least 1 time), Scientific presentation workshop (at least 1 time) - Turnitin program for plagiarism checking - Journal club (present at least 1 time, attend at least 5 times)
<p>2. Fulfil the expected outcomes of the Faculty of Tropical Medicine</p> <p>Tr - Transformation and Innovation</p> <p>Op - Open and globally connected</p> <p>M- Multidisciplinary</p> <p>E- Entrepreneurship</p> <p>D- Data-driven decision</p>	

2. Development of Learning Outcome in Each Objective

Expected Outcome	Teaching Strategies	Evaluation Strategies
1. Morality and Ethics		
1.1 Demonstrate good moral 1.2 Demonstrate the school health situation and solve health problems in schools with ethical consideration	- Practice - Problem solving - Field of study - Proposal, Thesis/Thematic paper writing	- Observation of ethical manner using rubric scoring assessment - Rubric scoring of report (citation) - Ethical approval - Defense of proposal & thesis/thematic paper
2. Knowledge		
2.1 Describe school health problems using theory and practice for academic and professional development	- Lecture, - Work assignment - Field of study	- Written examination and assignment with rubric scoring
3. Intellectual Development		
3.1 Apply school health knowledge and create concept idea for school health project 3.2 Identify the current challenges affecting school health 3.3 Demonstrate sharing knowledge, providing health counseling for the benefit of school health development projects 3.4 Design creative activities for health promotion in school effectively 3.5 Design plans and implement the school health development projects themselves	- Case based learning - Work assignment - Field of study - Presentation - Problem solving - Q&A, Discussion - Proposal, Thesis/Thematic paper presentation/writing	- Comprehensive Examination - Rubric scoring assessment of presentation, problem solving, discussion and defense of proposal & Thesis/thematic paper

Expected Outcome	Teaching Strategies	Evaluation Strategies
4. Interpersonal Relationship and Responsibility		
4.1 Work effectively with others and have a good relationship 4.2 Handle their assignments effectively and with discipline, responsibility 4.3 Manage teamwork for school health actioning	- Group assignment and group collaboration in class school visit and field of study.	- Rubric scoring assessment of assignment, observation of team work
5. Mathematical Analytical Thinking, Communication Skills, and Information Technology Skills		
5.1 Apply statistical tools to analyze school health data 5.2 Apply information technology to analyze and present data for the research appropriately	- Field of study - Assignment practice for conducting thesis/thematic paper	1) Performance assessment using rubric score 2) Thesis/thematic paper examination (writing and presentation)

3. Curriculum Mapping

Please see Appendix C.

Section 5 Criteria for Student Evaluation

1. Grading System

Grading system and graduation shall be complied with the criteria stated in Regulations of Mahidol University on Graduate studies.

2. Evaluation Process for the Learning Outcome of Students

- 2.1 Annual assessment of the student's examination results, both for each course and the overall program
- 2.2 Instructor assessment on the student's ability to apply their knowledge learnt from previous course
- 2.3 Instructors annually revise the content of each course
- 2.4 Graduate interview
- 2.5 Stakeholder interview

3. Graduation Requirement

3.1 Plan A2

- 3.1.1 Total time of study should not exceed the study plan.
- 3.1.2 Students must complete courses as stated in the curriculum at least 24 credits including thesis (12 credits) and 36 credits in total with a minimum CUM-GPA of 3.00
- 3.1.3 Students must meet the English Competence Standard of Graduate Students, Mahidol University defined by the Faculty of Graduate Studies, Mahidol University.
- 3.1.4 Students must participate in professional and personal skills development of the Faculty of Graduate Studies, Mahidol University
- 3.1.5 Students must have oral presentation for their thesis and pass the thesis defense examination by the thesis defense committees approved by following Regulations of Mahidol University on Graduate Studies. The thesis examination will be opened to a general audience.
- 3.1.6 The thesis or some parts of the thesis is required to be published in national or international academic journals accredited by Office of the Higher Education Commission Thailand regarding to guidelines for journal publication to achieve academic positions. Alternatively, it can be presented to academic conferences provided with conference proceedings, and to follow regulations from Faculty of Graduate Studies

3.2 Plan B

- 3.2.1 Total time of study should not exceed the study plan.
- 3.2.2 Students must complete their courses as stated in the curriculum with at least 30 credits including thematic paper (6 credits) and 36 credits in total with a minimum CUM-GPA of 3.00
- 3.2.3 Students must meet the English Competence Standard of Graduate Students, Mahidol University defined by the Faculty of Graduate Studies, Mahidol University.
- 3.2.4 Students must participate in professional skill development activities of the Faculty of Graduate Studies, Mahidol University
- 3.2.5 Students must pass the comprehensive examination following Regulations of Mahidol University on Graduate Studies.
- 3.2.6 Students must have oral presentation for their thematic paper and pass the thematic paper defense examination by thematic paper defense committees approved by following Regulations of Mahidol University on Graduate Studies. The thematic paper examination will be opened to a general audience by following Regulations of Mahidol University on Graduate Studies. The thematic examination will be an examination open to a general audience.
- 3.2.7 The thematic paper or a part of thematic paper must be published and can be searched

Section 6 Faculty Development

1. The Orientation for New Faculty Members

1.1 New instructors have to attend the orientation to ensure that they know and understand the policy of the University and the Faculty, as well as to understand the courses in the curriculum they are to teach.

1.2 New instructors have to be trained on teaching, learning approaches, teaching plan preparation and teaching evaluation.

1.3 Mentoring system should be established for new academic staff regarding the teaching session and a thesis advisor.

2. Development of knowledge and skills for the faculty in the areas of:

2.1 Skills Development in Teaching and Evaluation

- 1) Provide workshops to develop skills on teaching and learning methods.
- 2) Encourage the faculties to increase their knowledge and experience in order to enhance their teaching and research works by furthering their studies and participating in trainings, workshops and conferences
- 3) Allow instructors to participate in the evaluation and revision of the curriculum and courses as well as develop a new curriculum.

2.2 Other academic and professional skills

- 1) Support instructors to do research, produce and present academic projects and write the manuscript for submitting to international journal.
- 2) Encourage and support instructors to attend meetings, training sessions, seminars and conferences both national and international levels.

Section 7 Quality Assurance

1. Regulatory Standard

- 1.1 Director of the program is responsible for the program management in all courses of Master of Science (School Health). For courses that are administered jointly between departments, the Director of the program will assign course coordinator to supervise the course management to achieve the objectives of the course.
- 1.2 The Program must be reviewed and update every year, whereas the major revision or update must be done every 5 years.
- 1.3 Program committee evaluates and makes a review of Program submitted to Office of Higher Education Commission (OHEC) for quality assessment via online system.

Faculty of Tropical Medicine has established the Bangkok School of Tropical Medicine (BSTM) under the supervision of the Deputy Dean for Education and Deputy Dean for Student Affairs working together with the Director of the Programs to administer the Program management. There is also a Steering Committee of BSTM to make certain that the Programs of the Faculty of Tropical Medicine are complied with all regulations from every authority.

2. Graduates

For the process of quality improvement, the information on the success of the Program is also based on the success of the graduates in terms of employment rate, active life-long learning, working or further education in the field of school health.

The follow-up system, satisfaction system, etc. have been setup for gather the information to feed back for the improvement and revision of the Program.

3. Students

3.1 The enrolment process has been changed to improve the effectiveness of screening and recruitment More than 80% of students in the Program are international students from abroad, therefore the application and enrolment procedures are adapted to make the process as convenient as possible. Therefore, the online application system, online entrance examination, online interview processes are provided to make sure the accessibility for all prospective students. All students are required to pass English proficiency test according to the requirement of the Faculty of Graduate Studies.

3.2 Orientations: Program provides student handbook in a soft copy, a link to websites in which students can access anywhere anytime. However, the orientation has been given to all students at the beginning of the first and second semesters. These include detail of each course objectives, course learning outcomes, teaching and learning activities and student assessments.

3.3 Mentoring and advisory: Bangkok School of Tropical Medicine has appointed Student Affairs Advisory Team consisted of lecturers and volunteers. This Advisory Team, different from the Thesis/Thematic Advisory Team, give personal advice to students in general aspects. Students can consult, report any problems, voice their opinions or give feedbacks via e-mail to Academic Advisory team. The e-mail shall be checked and response regularly at daily basis; this can facilitate the response of any problem arisen during the study at the Program. Moreover, students can directly contact BSTM officer and director of the Program via e-mail.

3.4 Appeal Process: In case of any doubt or uncertainty in the marks or grades of the student assessments, students can directly contact advisors, supervisors, lecturers or Director of the Program. In case that student would like to appeal the marks or grades, there are several processes this can be done. Students can appeal via website <http://www.tm.mahidol.ac.th/eng/dean.php>, suggestion box, e-mail or submit the Appeal form to Director of the Program, Deputy Dean for Education, Dean of Faculty of Tropical Medicine, or Dean of Faculty of Graduate Studies.

4. Instructors

Almost instructors of the program are Ph.D. holders (or equivalent) and guest lecturer are experts in child health. The promotion of academic staff is merit-based following the standard process of Mahidol University. Individual academic staff can develop his/her career path according to the guidelines provided by Mahidol University.

5. Program, Study and Student Assessment

The curriculum and course syllabus were developed and designed base on the feedback from all stakeholders. The executive committees of the Program have the monthly meetings in order to evaluate and brainstorming for update, revision the content of each subject and teaching methods.

Student evaluation about course content, teaching and learning process, assessment methods and curriculum are performed regularly at the end of each course and semester. All of these activities and relevant systems aim to help students achieve objectives of the Program. Feedbacks from the national lecturers are collected once a year. The international experts send their feedbacks at the end of each course. Feedback from teaching staff and support staff is helpful in the process of the courses and curriculum development and improvement. The

feedbacks from staff members are collected regularly through Program- executive committee meetings.

The curriculum and Program is minor reviewed and update every year and the major revision of the Program occurs every 5 years.

6. Learning Support

6.1 Students must access to the online learning platform at Mahidol University Extension (MUx), provided by Mahidol University (www.mux.mahidol.ac.th). All study materials and communication among lecturers and students are provided at this site. Students can also track their learning performance (grade score) from this site. Course instructors and IT staff of the Department of Tropical Hygiene will be available to assist on the use of the online-learning platform.

6.2 Student can access to e-library of Mahidol University that provide free access to various electronic books and journals that can be used during the study. Distance students can access to the e-library by using Virtual Private Network (VPN). The instruction of VPN access will be provided to the students.

6.3 The Deputy Dean for Education and staff of BSTM can assist the students regarding to academic and non-academic problems.

7. Key Performance Indicators

Master of Science in School Health divides key performance indicators based on the curriculum that meets the standards of Thai Qualifications Framework following the conditions: (1) the compulsory performance indicators (number 1-5) must achieve at least two consecutive years and (2) the total number of performance indicators must reach their goals by not less than 80 percent. The key performance indicators are as follows:

Key Performance Indicators	Academic Year				
	2020	2021	2022	2023	2024
1. At least 80% of all person in charge of the curriculum have to participate in meetings that set up plans to evaluate and revise the curriculum.	✓	✓	✓	✓	✓
2. The program must have the details of the curriculum according to TQF2 which is associated with the Thai Qualifications Framework or the standards of the program	✓	✓	✓	✓	✓

Key Performance Indicators	Academic Year				
	2020	2021	2022	2023	2024
3. The program must have course specifications and field experience specifications according to TQF3 before the beginning of each semester	✓	✓	✓	✓	✓
4. Instructors must produce course reports and file experience reports according to TQF5 and within 30 days after the end of the semester.	✓	✓	✓	✓	✓
5. Instructors must produce program reports according to TQF7 within 60 days after the end of the academic year	✓	✓	✓	✓	✓
6. Instructors must revise the grading of students according to learning standards indicated in TQF3 for at least 25 percent of courses that are offered each academic year.	✓	✓	✓	✓	✓
7. Instructors must assess the development and/or improvement of teaching methods, teaching techniques or the grading system from the evaluation results in TQF 7 of the previous year.		✓	✓	✓	✓
8. Every new instructor has to participate in the orientation or receive adequate information on the Faculty's teaching requirements.	✓	✓	✓	✓	✓
9. Full-time instructors must demonstrate academic and/or profession improvement at least once a year.	✓	✓	✓	✓	✓
10. The number of supporting staff who demonstrate academic and/or professional improvement by at least 50 percent each year.	✓	✓	✓	✓	✓
11. The level of satisfaction from the previous year's students and new graduates toward curriculum quality, with an average score of at least 3.5 out of 5				✓	✓
12. The level of satisfaction from employers of new graduates with an average score of at least 3.5 out of 5					✓

Section 8

Evaluation and Improvement of the Curriculum Implementation

1. Evaluation on the Teaching Efficiency

1.1 Evaluation of Teaching Strategies

1.1.1 Analysis of students' evaluation towards courses and instructors

1.1.2 Discussion among the faculty meeting to exchange ideas or comments

1.2 Evaluation of Instructors' Skills in Using Teaching Strategies

1.2.1 Analysis of students' evaluation towards courses and instructors

1.2.2 Evaluation from instructors themselves and faculty

2. Overall Evaluation of the Curriculum

2.1 Survey instructors' opinions toward students and vice versa

2.2 Survey on jobs of graduates

2.3 Curriculum evaluation from external expertise

2.4 Survey on employers' satisfaction with graduates

3. Evaluation of Curriculum Implementation in Accordance with the Curriculum

Evaluation is made annually by the program director and instructors according to the key performance indicators of section 7, item 7. The evaluation committee comprises of at least 3 persons:

- 1) Program Director, and
- 2) Program secretariat, and
- 3) External expert in School Health

The criteria of curriculum revision are

“Fair” means the program does not cover the first 10 Key Performance Indicators,

“Good” means the program shows all first 10 Key Performance Indicators,

“Excellent” means the program has all Key Performance Indicators.

4. Review of the Evaluation and Plans for Improvement

- 4.1 Gathering all information, advices, and evaluations of the newly graduates, employers, alumni, and experts to feedback for improvement. Information includes satisfaction, needs and expectations of the stakeholders.
- 4.2 Review and analyze the above information by the faculty member in-charge of the program
- 4.3 Presenting the improvement plan for the program at the end of every academic year
- 4.4 Make a major revision and update of the whole program every 5 years

Appendix A

Course Description

Appendix A

Course Description

(1) Required Courses

	Credits (Lecture-Lab-Self study)
TMSH 502 Diseases in School Children วขอร ๕๐๒ โรคที่เกิดกับเด็กวัยเรียน Etiology, mechanisms of diseases; symptoms, signs, courses, initial care and management; prevention and control of diseases in school children สาเหตุ กลไกการเกิดโรค อาการ สิ่งตรวจพบ การดำเนินโรค การดูแลและการรักษาเบื้องต้น การป้องกันและการควบคุมโรคที่เกิดกับเด็กวัยเรียน	3 (2-2-5)
TMSH 503 School Environment Management วขอร ๕๐๓ การจัดการสิ่งแวดล้อมโรงเรียน The basic school environment; physical threats, chemical threats and biological threats; the school environment assessment; the school environment management; planning interventions for the health protection and health promotion in school children and school environments สิ่งแวดล้อมโรงเรียนขั้นพื้นฐาน สิ่งคุกคามทางกายภาพ สิ่งคุกคามทางเคมี และสิ่งคุกคามทางชีวภาพ การประเมินสภาพแวดล้อมโรงเรียน การจัดการสิ่งแวดล้อมโรงเรียน การวางแผนให้ความคุ้มครองสุขภาพและการส่งเสริมสุขภาพเด็กวัยเรียนและสิ่งแวดล้อมโรงเรียน	2 (2-0-4)
TMSH 504 School Health Development วขอร ๕๐๔ การพัฒนาอนามัยโรงเรียน The school health development in a conceptual framework; structured development plans; activities and operating school health; virtue and ethics of school health personnel; the health promotion in schools and in the communities; the supervision and evaluation of the work performance; school health research; the role of student leaders and health volunteers การพัฒนาอนามัยโรงเรียน ด้านกรอบแนวคิด แผนพัฒนาโครงสร้าง กิจกรรม และการดำเนินงานอนามัยโรงเรียน คุณธรรมและจริยธรรมของบุคลากรอนามัยโรงเรียน ความคิดสร้างสรรค์เพื่อการส่งเสริมสุขภาพในโรงเรียนและในชุมชน การนิเทศติดตามประเมินผลการดำเนินงาน การวิจัยอนามัยโรงเรียน บทบาทผู้นำนักเรียนและอาสาสมัครทางการอนามัย	2 (1-2-3)

Credits (Lecture-Lab-Self study)

TMSH 505 School Health Management

2 (0-4-2)

วขอร ๕๐๕ การจัดการอนามัยโรงเรียน

The school health management; policy and action plans; analyses of school situations and environment; the activity development; the school health program assessment; virtue and ethics of school health personnel; the field practice of students in the selected schools

การจัดการอนามัยโรงเรียน นโยบายและแผนการปฏิบัติ วิเคราะห์สถานการณ์และสภาพแวดล้อมของโรงเรียน การพัฒนากิจกรรม การประเมินผลโครงการอนามัยโรงเรียน คุณธรรมและจริยธรรมของบุคลากรอนามัยโรงเรียน การศึกษาดูงานของนักศึกษาในโรงเรียนที่ถูกเลือก

TMSH 512 Health Issues in Schools

3 (3-0-6)

วขอร ๕๑๒ ประเด็นสุขภาพในโรงเรียน

Health problems of school children; physical, mental, spiritual, and social aspects; planning for the school health development for child growth and good health; principle and concept of sustainable management in school

ปัญหาสุขภาพของเด็กในวัยเรียนด้านร่างกาย อารมณ์ จิตใจ และสังคม และการวางแผนเพื่อการพัฒนาทางด้านอนามัยโรงเรียน เพื่อการเจริญเติบโตและสุขภาพที่ดีของเด็ก หลักการและแนวคิดการพัฒนาโรงเรียนสู่ความยั่งยืน

สังคม และการวางแผนเพื่อการพัฒนาทางด้านอนามัยโรงเรียน เพื่อการเจริญเติบโตและสุขภาพที่ดีของเด็ก

TMSH 513 Nutrition Principles for School Children

2 (2-0-4)

วขอร ๕๑๓ หลักโภชนาศาสตร์สำหรับเด็กวัยเรียน

The role and significance of food in human health and the way of life nutrient requirements for the growth and development in childhood; illness due to the imbalance of dietary intakes; undernutrition and overnutrition; the important roles of foods in the disease prevention

บทบาทและความสำคัญของอาหารต่อสุขภาพมนุษย์และการดำเนินชีวิต ความต้องการสารอาหารเพื่อการเจริญเติบโตและการพัฒนาการในวัยเด็ก ความเจ็บป่วยอันเนื่องมาจากความไม่สมดุลของการกินอาหาร โรคโภชนาการขาด และโรคโภชนาการเกิน บทบาทสำคัญของอาหารของการป้องกันโรค

Credits (Lecture-Lab-Self study)

TMSH 514 School Health Seminars

2 (2-0-4)

วขอร ๕๑๔ สัมมนาอนามัยโรงเรียน

Seminars on the school health policy; the environment, diseases concerning nutritions, school health plans and development

นโยบายอนามัยโรงเรียน สิ่งแวดล้อม โรคเกี่ยวกับภาวะโภชนาการ การวางแผนและพัฒนาอนามัยโรงเรียน

TMSH 515 Epidemiology and Biostatistics in School Health

2 (2-0-4)

วขอร ๕๑๕ วิทยาการระบาดและสถิติทางอนามัยโรงเรียน

Epidemiology and basic statistical methods in school health; measurements in epidemiology; risk assessment and the level of association; the connection between the association and the reasonable conclusion; the research designs review; statistical methodology; data analyses and interpretations

ระบาดวิทยาและวิธีการทางสถิติในงานอนามัยโรงเรียน การวัดค่าต่างๆ ทางระบาดวิทยา การประเมินความเสี่ยงและระดับความสัมพันธ์ การเชื่อมโยงความสัมพันธ์ไปสู่การสรุปผลอย่างเป็นเหตุเป็นผล การทบทวนรูปแบบการวิจัย ระเบียบวิธีทางสถิติ และการวิเคราะห์และการแปลผล

TMID 544 Research Methodology

2 (2-0-4)

วขสว ๕๔๔ วิทยาระเบียบวิธีวิจัย

Formulation of rationale, research questions, objectives and research titles; study design; sample size calculation; data analysis; ethics issues in biomedical and social science research

หลักการและเหตุผล คำถามวิจัย วัตถุประสงค์ หัวข้อวิจัย การออกแบบงานวิจัย การคำนวณขนาดตัวอย่าง การวิเคราะห์ข้อมูล จริยธรรมการวิจัยทางวิทยาศาสตร์การแพทย์และสังคมศาสตร์

(2) Elective Courses

TMSH 511 Special Topics in School-Health Based Research

2 (2-0-4)

วขอร ๕๑๑ หัวข้อพิเศษการวิจัยบนพื้นฐานของอนามัยโรงเรียน

An integration of knowledges regarding concerning the school health- based research; critic appraisals of published articles; presenting independent data

บูรณาการหัวข้อความรู้ในหัวข้อที่เกี่ยวข้องกับการวิจัยด้านอนามัยโรงเรียน การประเมินบทความที่ได้รับการตีพิมพ์ การนำเสนอข้อมูลที่เป็นอิสระ

Credits (Lecture-Lab-Self study)**TMSH 516 Food for School Children****2 (2-0-4)****วขอร ๕๑๖ อาหารสำหรับเด็กวัยเรียน**

Food production; cultivation children and harvesting; livestock; food preservations; food choices with proper nutrition; nutritional counselling according to food safety the nutrition principles, preparations of food for families and food in school

การผลิตอาหาร การเพาะปลูกและการเก็บเกี่ยว การเลี้ยงสัตว์เป็นอาหาร การถนอมอาหารไว้ให้คงคุณค่า การเลือกกินอาหารให้ได้โภชนาการที่เหมาะสม การให้คำปรึกษาเกี่ยวกับอาหารปลอดภัย การจัดเตรียมอาหารเพื่อครอบครัวและอาหารในโรงเรียน

TMSH 517 Health Behaviors of School Children**2 (2-0-4)****วขอร ๕๑๗ พฤติกรรมสุขภาพของเด็กวัยเรียน**

Health behaviors of children and disabled children; health risk behaviors; determinants of health; interpersonal and situational influences; behavioral outcome; health behavior at homes, schools, and communities; health behavior changes; good health targets, the quality of life, and children's good healthy

พฤติกรรมสุขภาพของเด็กและเด็กพิการ พฤติกรรมเสี่ยง ตัวกำหนดพฤติกรรมสุขภาพ อิทธิพลความสัมพันธ์ระหว่างบุคคลและสถานการณ์ ผลลัพธ์ของพฤติกรรม สุขนิสัยที่บ้านโรงเรียนและชุมชน การปรับเปลี่ยนพฤติกรรมสุขภาพ เป้าหมายสุขภาพดี คุณภาพชีวิต และสุขภาวะที่ดีของเด็ก

TMSH 518 Instructional Media Design for School Health Promotions**2 (1-2-3)****วขอร ๕๑๘ การออกแบบสื่อการเรียนการสอนเพื่อการส่งเสริมอนามัยโรงเรียน**

Principles and approaches of instructional media design for health promotion in school; media and message design; essential technology for instructional media design; implementations, and evaluations; ethics of instructional media design

หลักการและวิธีการของออกแบบสื่อการเรียนการสอนเพื่อส่งเสริมสุขภาพในโรงเรียน สื่อและการออกแบบการสื่อสาร เทคโนโลยีที่จำเป็นในการออกแบบสื่อการเรียนการสอน การนำสื่อการสอนไปใช้และการประเมินผลจรรยาบรรณของการออกแบบสื่อการเรียนการสอน

Credits (Lecture-Lab-Self study)

TMSE 524 Principles of Environmental Health and Toxicology 2 (2-0-4)

วขอส ๕๒๔ หลักการทางสุขภาพสิ่งแวดล้อมและพิษวิทยา

Environmental health and toxicology; the human- environment relationship; sources and types of environmental pollutants; fate and transport of environmental pollutants in the environment; toxicokinetics and metabolism; adverse effects on human health and the environment; environmental management approach and the overview of relevant laws and regulations

สุขภาพสิ่งแวดล้อมและพิษวิทยา ความสัมพันธ์ของมนุษย์กับสิ่งแวดล้อม แหล่งกำเนิดและชนิดของมลพิษในสิ่งแวดล้อม วิธีและการเคลื่อนย้ายของสารมลพิษในสิ่งแวดล้อม จลนพลศาสตร์และเมตาบอลิซึมของสารพิษในร่างกาย ผลกระทบต่อสุขภาพของมนุษย์และสิ่งแวดล้อม แนวทางในการจัดการสิ่งแวดล้อม และภาพรวมของกฎหมาย ข้อบังคับที่เกี่ยวข้อง

TMSE 528 Environmental Management 2 (2-0-4)

วขอส ๕๒๘ การจัดการสิ่งแวดล้อม

Principles of environmental management covering air, water, hazardous substances, solid and hazardous wastes, vectors and tropical pathogens; environmental management policy and planning; disaster management, techniques and methods in environmental management; Sustainable development and environmental management, environmental laws and standards, Environmental monitoring process; health, safety, and accident management.

หลักการจัดการสิ่งแวดล้อม ครอบคลุมถึง คุณภาพอากาศ น้ำ สารอันตราย ขยะอันตรายและมูลฝอย พาหะนำโรคและเชื้อโรคในเขตร้อน นโยบายและการวางแผนด้านสิ่งแวดล้อม การจัดการภัยพิบัติเทคนิคและเทคนิค วิธีการในการจัดการสิ่งแวดล้อมเพื่อการพัฒนาที่ยั่งยืนและการจัดการสิ่งแวดล้อม กฎหมายและมาตรฐานด้านสิ่งแวดล้อม กระบวนการตรวจสอบด้านสิ่งแวดล้อม สุขภาพ ความปลอดภัยและการจัดการอุบัติเหตุ

TMHG 549 Application of Geographical Information System (GIS)
in Epidemiology 2(1-2-3)

วขสข ๕๔๙ การประยุกต์ระบบสารสนเทศภูมิศาสตร์ในวิทยาการระบาด

Disease mapping of diseases; Geographical Information System (GIS); Remote Sensing (RS); Global Positioning System (GPS)

การจัดทำแผนที่แสดงการกระจายของโรค ระบบสารสนเทศภูมิศาสตร์ การรับรู้จากระยะไกล ระบบกำหนดตำแหน่งทั่วโรค

Credits (Lecture-Lab-Self study)

TMCD 519 AIDS

2(2-0-4)

วขอข ๕๑๙ โรคเอดส์

AIDS epidemiology, virology, immunopathogenesis, host immune response to HIV virus, diagnosis, clinical manifestations, treatment, prophylaxis and prevention especially AIDS vaccines together with the comprehensive information about psychosocial impacts and HIV counseling leading to holistic cares of HIV- infected patients

วิทยาการระบาดของโรคเอดส์ไวรัสวิทยา พยาธิกำเนิดของโรคทางด้านระบบภูมิคุ้มกัน การตอบสนองของร่างกายต่อเชื้อไวรัสเอชไอวีการวินิจฉัยโรค อาการแสดงทางคลินิก การรักษา การป้องกัน และ วัคซีนโรคเอดส์ข้อมูลในเชิงกว้างเกี่ยวกับผลกระทบทางจิตใจและสังคมต่อ ผู้ติดเชื้อ การให้คำปรึกษากับผู้ติดเชื้อ เอชไอวีเพื่อนำไปสู่การดูแลผู้ติดเชื้อในคลินิกโรคเอดส์แบบองค์รวม

TMNU 506 Nutrition

2 (2-0-4)

วขภ ๕๐๖ โภชนศาสตร์

Digestion, absorption and transport of macronutrients and micronutrients. Methodologies for nutritional assessment, nutritional status in various age ranges. The relationship between nutrition and diseases as well as nutritional problems in Thailand and South-East Asia region. Nutrition intervention and nutrition education

กระบวนการย่อยอาหาร การดูดซึม และการลำเลียงสารอาหารหลักที่ร่างกายต้องการในปริมาณ มาก และสารอาหารที่ร่างกายต้องการในปริมาณน้อย การประเมินภาวะโภชนาการ ภาวะโภชนาการในทุกกลุ่ม อายุ ความสัมพันธ์ระหว่างภาวะโภชนาการกับการเกิดโรคต่างๆ ปัญหาทางโภชนาการในประเทศไทยและภูมิภาค เอเชียตะวันออกเฉียงใต้ การส่งเสริมและปรับปรุงภาวะโภชนาการ รวมถึงการให้ความรู้ด้านโภชนาการ

(3) Thesis

TMSH 698 Thesis

12 (0-36-0)

วขอร ๖๙๘ วิทยานิพนธ์

Identifying research proposals; conducting research research ethics; data, analyses, interpreting results and reporting results in terms of thesis; presenting and publishing research in standardized journals or- conferences proceedings

การกำหนดโครงการวิจัย การเสนอเค้าโครงวิจัย จริยธรรมการวิจัย การคัดกรองข้อมูล การวิเคราะห์ข้อมูล การสังเคราะห์และวิพากษ์ผลการวิจัย การนำผลการวิจัยมาเรียบเรียงเป็นวิทยานิพนธ์ การนำเสนอวิทยานิพนธ์ การเรียบเรียงผลงานวิจัยเพื่อเผยแพร่ การเผยแพร่ผลงานวิจัยในวารสารหรือสิ่งพิมพ์ทาง วิชาการที่มีมาตรฐาน หรือเสนอต่อที่ประชุมวิชาการ

(4) Thematic Paper

Credits (Lecture-Lab-Self study)

TMSH 697 Thematic Paper

6 (0-18-0)

วขอร ๖๙๗ สารนิพนธ์

Identifying questions in school health; searching knowledge to solve the problems by conducting research, presenting or publishing results

การกำหนดปัญหาทางด้านอนามัยโรงเรียน การหาความรู้เพื่อตอบปัญหาโดยการวิจัย การนำเสนอผลที่ได้

Appendix B

Curriculum Vitae of the Faculty
in Charge of the Program

APPENDIX B

Curriculum Vitae of the Faculty instructors

Curriculum Vitae of the full time instructors of the curriculum

1. Name: Professor Dr. Rungsunn Tungtrongchitr

Education

Degree	Degree Name	Institute	Year
Ph.D.	Tropical Medicine	Mahidol University	1988
M.Sc.	Tropical Medicine	Mahidol University	1981
B.Sc.	Medical Technology	Mahidol University	1978

Affiliation: Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine, Mahidol University

Interested research/ expertise

Biochemical Nutrition, Molecular Nutrition, Nutrigenomics

Publication that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	1.Karuwanarint P, Phonrat B, Tungtrongchitr A, Schweigert FJ, Tungtrongchitr R . Vitamin D-binding protein and its polymorphisms as a predictor for metabolic syndrome. Biomark Med. 2018;12(5):465-73.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Karuwanarint P, Phonrat B, Tungtrongchitr A, Suriyaprom K, Tungtrongchitr R . Genetic variations of vitamin D receptor gene in metabolic syndrome and related diseases in the Thai population. Asia Pacific J Clin Nutr. 2018;27(4):935-44.	12/1	2018
Journal articles	3. Santiprabhob J, Limprayoon K, Aanpreung P, Charoensakdi R, Kalpravidh RW, Phonrat B, Tungtrongchitr R . The impact of group-based treatment program on insulin resistance, adipocytokines, oxidative stress and inflammatory cytokines in obese children and adolescents. J Pediatr Endocrinol Metab. 2018;31(7):733-42.	12/1	2018
Journal articles	4. Chuaychoo B, Tungtrongchitr R , Kriengsinyos W, Tuntipopipat S, On-Nom N, Chupeerach C. Correlation of vitamin D binding protein gene polymorphism and protein levels in COPD compared to non-COPD subjects. Pers Med. 2018; doi:10.2217/pme-2018-0005.	12/1	2018
Journal articles	5. Mosikanon K, Arthan D, Kettawan A, Tungtrongchitr R , Prangthip P. Yeast β -glucan modulates inflammation and waist circumference in overweight and obese subjects. J Diet Suppl. 2017;14(2):173-85.	12/1	2017

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	6. Kitjaroentharn A, Hananantachai H, Phonrat B, Preutthipan S, Tungtrongchitr R. Low density lipoprotein receptor-related protein 5 gene polymorphisms and osteoporosis in Thai menopausal women. J Negat Results BioMed. 2016;15:16	12/1	2016
Journal articles	7. Chaikhiandee S, Phonrat B, Tungtrongchitr A, Suriyaprom K, Chuengsamarn S, Uttamachai C, Tungtrongchitr R. Adipoq gene polymorphisms in thais with pre-diabetes. Southeast Asian J Trop Med Public Health. 2016;47:1311-9.	12/1	2016

Current Teaching Load

TMSH	505	School Health Management	2 (0-4-2)
TMSH	506	Nutrition Principles for School Children	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	505	School Health Management	2 (0-4-2)
TMSH	513	Nutrition Principles for School Children	3 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

2. Name: Associate Professor Dr. Aongart Mahittikorn

Education

Degree	Degree name	Institute	Year
Ph.D.	Tropical Medicine	Mahidol University	2009
B.Sc.	Public Health	Mahidol University	2003

Affiliation: Department of Protozoology, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

Toxoplasmosis

Publication that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Pintong AR, Sunyanusin S, Prasertbun R, Mahittikorn A , Mori H, Changbunjong T, et al. <i>Blastocystis</i> subtype 5: Predominant subtype on pig farms, Thailand. <u>Parasitol Int.</u> 2018; 67(6): 824-8.	12/1	2018
Journal articles	2. Udonsom R, Prasertbun R, Mahittikorn A , Mori H, Changbunjong T, Komalamisra C, et al. <i>Blastocystis</i> infection and subtype distribution in humans, cattle, goats, and pigs in central and western Thailand. <i>Infect Genet Evol.</i> 2018; 65:107-1	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	3. McLennan MR, Mori H, Mahittikorn A , Prasertbun R, Hagiwara K, Huffman MA. Zoonotic Enterobacterial Pathogens Detected in Wild Chimpanzees. Ecohealth. 2018; 15(1): 143-7.	12/1	2018
Journal articles	4. Mahittikorn A , Thammasonthijarern N, Roobthaisong A, Udonsom R, Popruk S, Siri S, et al. Development of a loop-mediated isothermal amplification technique and comparison with quantitative real-time PCR for the rapid visual detection of canine neosporosis. Parasit Vectors. 2017; 10(1): 394.	12/1	2017
Journal articles	5. Prasertbun R, Mori H, Pintong AR, Sanyanusin S, Popruk S, Komalamisra C, Changbunjong T, Buddhirongawatr R, Sukthana Y, Mahittikorn A . Zoonotic potential of Enterocytozoon genotypes in humans and pigs in Thailand. Vet Parasitol. 2017; 233: 73-9.	12/1	2017

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	6. Mahittikorn A , Kittichathanakul T, To-Im J, Nacapunchai D. Knowledge, Behavior, and Free-Living Amoebae Contamination of Cosmetic Contact Lens Among University Wearers in Thailand: A Cross-Sectional Study. Eye Contact Lens. 2017; 43(2): 81-8.	12/1	2017
Journal articles	7. Palasuwan A, Palasuwan D, Mahittikorn A , Chiabchalard R, Combes V, Popruk S. Subtype Distribution of <i>Blastocystis</i> in Communities along the Chao Phraya River, Thailand. Korean J Parasitol. 2016; 54(4): 455-60.	12/1	2016

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

3. Name: Associate Professor Chukiat Sirivichayakul

Education

Degree	Degree name	Institute	Year
Diploma Thai Board	Pediatrics	Thai Medical Council	1991
D.T.M. & H.	Tropical Medicine and Hygiene	Mahidol University	1997
M.D.	-	Chulalongkorn University	1985

Affiliation: Department of Tropical Pediatric, Faculty of Tropical Medicine, Mahidol University

Interested research/ expertise

Pediatric infectious disease, Vaccine research

Publication that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Potiwat R, Tanyaratsrisakul S, Maneewatcharangsri S, Manuyakorn W, Rerkpattanapipat T, Samung Y, Sirivichayakul C , et al. Solenopsis geminata (tropical fire ant) anaphylaxis among Thai patients: its allergens and specific IgE-reactivity. Asian Pac J Allergy Immunol. 2018 Jun;36(2):101-8.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Yamagishi J, Runtuwene LR, Hayashida K, Mongan AE, Thi LAN, Thuy LN, Nhat CN, Limkittikul K, Sirivichayakul C , et al. Serotyping dengue virus with isothermal amplification and a portable sequencer. Sci Rep. 2017;7(1):3510.	12/1	2017
Journal articles	3. Chatchen S, Sabchareon A, Sirivichayakul C . Serodiagnosis of asymptomatic dengue infection. Asian Pac J Trop Med 2017;10(1):11-4.	12/1	2017
Journal articles	4. Chokephaibulkit K, Sirivichayakul C , Thisyakorn U, Pancharoen C, Boaz M, Bouckennooghe A, et al. Long-term follow-up of Japanese encephalitis chimeric virus vaccine: Immune responses in children. Vaccine. 2016; 34(46): 5664-9.	12/1	2016
Journal articles	5. Plennevaux E, Sabchareon A, Limkittikul K, Chanthavanich P, Sirivichayakul C , Moureau A, Boaz M, Wartel TA, Saville M, Bouckennooghe A. Detection of dengue cases by serological testing in a dengue vaccine efficacy trial: Utility for efficacy evaluation and impact of future vaccine introduction. Vaccine. 2016; 34(24): 2707-12.	12/1	2016

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	6. Sirivichayakul C, Barranco-Santana EA, Esquelin-Rivera I, Oh HM, Raanan M, Sariol CA, et al. Safety and Immunogenicity of a Tetravalent Dengue Vaccine Candidate in Healthy Children and Adults in Dengue-Endemic Regions: A Randomized, Placebo-Controlled Phase 2 Study. J Infect Dis. 2016; 213(10): 1562-72.	12/1	2016

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

4. Name: Associate Professor Dr. Direk Limmathurotsakul

Education

Degree	Degree Name	Institute	Year
Ph.D.	Life and Biomolecular Science	The Open University, UK.	2009
M.Sc.	Medical Statistics	London School of Hygiene and Tropical Medicine, UK.	2008
M.D.	-	Chulalongkorn University	2000

Affiliation: Department of Tropical Hygiene, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

1. Tropical infectious disease, including melioidosis, leptospirosis and rickettsiosis
2. Statistics, research methodology and epidemiology
3. Bayesian data analysis, and evaluating diagnostic tests with an imperfect gold standard

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Greer RC, Wangrangsimakul T, Amornchai P, Wuthiekanun V, Laongnualpanich A, Dance DAB, Limmathurotsakul D. Misidentification of <i>Burkholderia pseudomallei</i> as <i>Acinetobacter species</i> in northern Thailand. Trans R Soc Trop Med Hyg. 2019;113(1):48-51.	12/1	2019

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	2. Chaichana P, Jenjaroen K, Amornchai P, Chumseng S, Langla S, Rongkard P, Sumonwiriya M, Jeeyapant A, Chantratita N, Teparrukkul P, Limmathurotsakul D , et al. Antibodies in melioidosis: the role of the indirect hemagglutination assay in evaluating patients and exposed populations. Am J Trop Med Hyg. 2018; 99(6): 1378-85	12/1	2018
Journal articles	3. Dance DA, Limmathurotsakul D . Global burden and challenges of melioidosis. Trop Med Infect Dis. 2018; 3(1). pii: E13.	12/1	2018
Journal articles	4. Hantrakun V, Somayaji R, Teparrukkul P, Boonsri C, Rudd K, Day NPJ, West TE, Limmathurotsakul D . Clinical epidemiology and outcomes of community acquired infection and sepsis among hospitalized patients in a resource limited setting in Northeast Thailand: A prospective observational study (Ubon-sepsis). PLoS One. 2018; 13(9): e0204509.	12/1	2018

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	5. Rudd KE, Kissoon N, Limmathurotsakul D , Bory S, Mutahunga B, Seymour CW, et al. The global burden of sepsis: barriers and potential solutions. Crit Care. 2018; 22(1): 232.	12/1	2018
Journal articles	6. Wongsuvan G, Hantrakun V, Teparrukkul P, Imwong M, West TE, Wuthiekanun V, Day NPJ, AuCoin D, Limmathurotsakul D . Sensitivity and specificity of a lateral flow immunoassay (LFI) in serum samples for diagnosis of melioidosis. Trans R Soc Trop Med Hyg. 2018; 112(12): 568-70.	12/1	2018
Journal articles	7. Suntornsut P, Chaowagul W, Thongklang W, Phosri T, Day NPJ, Michie S, Limmathurotsakul D . Feasibility and initial outcomes of a multifaceted prevention Program of melioidosis in diabetic patients in Ubon Ratchathani, northeast Thailand. PLoS Negl Trop Dis. 2018; 12(9): e0006765.	12/1	2018

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	8. Fukuda K, Limmathurotsakul D , Okeke IN, Shetty N, van Doorn R, Feasey NA, et al. Surveillance and Epidemiology of Drug Resistant Infections Consortium (SEDRIC): Supporting the transition from strategy to action. Wellcome Open Res. 2018; 3: 59.	12/1	2018
Journal articles	9. Phokrai P, Karoonboonyanan W, Thanapattarapairoj N, Promkong C, Dulsuk A, Koosakulnirand S, Canovali S, Indrawattana N, Jutrakul Y, Wuthiekanun V, Limmathurotsakul D , et al. Rapid Immunochromatography Test Based on Hcp1 Is a Potential Point-of-Care Test for Serological Diagnosis of Melioidosis. J Clin Microbiol. 2018; 56(8). pii: e00346-18.	12/1	2018

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	10. Rudd KE, Seymour CW, Aluisio AR, Augustin ME, Bagenda DS, Beane A, Byiringiro JC, Chang CH, Colas LN, Day NPJ, De Silva AP, Dondorp AM, Dünser MW, Faiz MA, Grant DS, Haniffa R, Van Hao N, Kennedy JN, Levine AC, Limmathurotsakul D , et al. Association of the quick sequential (Sepsis-Related) organ failure assessment (qSOFA) score with excess hospital mortality in adults with suspected infection in low- and middle-income countries. JAMA. 2018; 319(21): 2202-11.	12/1	2018

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	11. Hinjoy S, Hantrakun V, Kongyu S, Kaewrakmuk J, Wangrangsimakul T, Jitsuronk S, Saengchun W, Bhengsri S, Akarachotpong T, Thamthitiwat S, Sangwichian O, Anunnatsiri S, Sermswan RW, Lertmemongkolchai G, Tharinjaroen CS, Preechasuth K, Udpaun R, Chuensombut P, Waranyasirikul N, Anudit C, Narenpitak S, Jutrakul Y, Teparrukkul P, Teerawattanasook N, Thanvisej K, Suphan A, Sukbut P, Ploddi K, Sirichotirat P, Chiewchanyon B, Rukseree K, Hongsuwan M, Wongsuwan G, Sunthornsut P, Wuthiekanun V, Sachaphimukh S, Wannapinij P, Chierakul W, Chewapreecha C, Thaipadungpanit J, Chantratita N, Korbsrisate S, Taunyok A, Dunachie S, Palittapongarnpim P, Sirisinha S, Kitphati R, Iamsirithaworn S, Chaowagul W, Chetchotisak P, Whistler T, Wongratanacheewin S, Limmathurotsakul D . Melioidosis in Thailand: Present and Future. Trop Med Infect Dis. 2018; 3(2): 38.	12/1	2018

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	12. Dance DAB, Sarovich D, Price EP, Limmathurotsakul D , Currie BJ. Human Infection with <i>Burkholderia thailandensis</i> , China, 2013. Emerg Infect Dis. 2018;24(5): 953-4.	12/1	2018
Journal articles	13. Haenssger MJ, Charoenboon N, Zanello G, Mayxay M, Reed-Tsochas F, Jones COH, Kosaikanont R, Praphattong P, Manohan P, Lubell Y, Newton PN, Keomany S, Wertheim HFL, Lienert J, Xayavong T, Warapikuptanun P, Khine Zaw Y, U-Thong P, Benjaroon P, Sangkham N, Wibunjak K, Chai-In P, Chailert S, Thavethanutthanawin P, Promsutt K, Thepkhamkong A, Sithongdeng N, Keovilayvanh M, Khamsoukthavong N, Phanthasomchit P, Phanthavong C, Boualaiseng S, Vongsavang S, Greer RC, Althaus T, Nedsuwan S, Intralawan D, Wangrangsimakul T, Limmathurotsakul D , et al. Antibiotics and activity spaces: protocol of an exploratory study of behaviour, marginalisation and knowledge diffusion. BMJ Glob Health. 2018; 3(2): e000621.	12/1	2018

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	14. Gouliouris T, Warne B, Cartwright EJP, Bedford L, Weerasuriya CK, Raven KE, Brown NM, Török ME, Limmathurotsakul D , et al. Duration of exposure to multiple antibiotics is associated with increased risk of VRE bacteraemia: a nested case-control study. J Antimicrob Chemother. 2018; 73(6): 1692-9.	12/1	2018
Journal articles	15. Sengyee S, Yoon SH, Paksanont S, Yimthin T, Wuthiekanun V, Limmathurotsakul D , et al. Comprehensive analysis of clinical <i>Burkholderia pseudomallei</i> isolates demonstrates conservation of unique lipid A structure and TLR4-dependent innate immune activation. PLoS Negl Trop Dis. 2018; 12(2): e0006287.	12/1	2018
Journal articles	16. Lie KC, Lau CY, Van Vinh Chau N, West TE, Limmathurotsakul D . Utility of SOFA score, management and outcomes of sepsis in Southeast Asia: a multinational multicenter prospective observational study. J Intensive Care. 2018; 6: 9.	12/1	2018

Publication types	Publication Name	Academic performance standard criteria/Weight	Years
Journal articles	17. Wongsuvan G, Wuthiekanun V, Hinjoy S, Day NP, Limmathurotsakul D . Antibiotic use in poultry: a survey of eight farms in Thailand. Bull World Health Organ. 2018; 96(2): 94-100.	12/1	2018
Journal articles	18. Wiersinga WJ, Virk HS, Torres AG, Currie BJ, Peacock SJ, Dance DAB, Limmathurotsakul D . Melioidosis. Nat Rev Dis Primers. 2018; 4: 17107.	12/1	2018
Journal articles	19. Hantrakun V, Thaipadungpanit J, Rongkard P, Srilohasin P, Amornchai P, Langla S, Mukaka M, Chantratita N, Wuthiekanun V, Dance DAB, Day NPJ, Peacock SJ, Limmathurotsakul D . Presence of <i>B. thailandensis</i> and <i>B. thailandensis</i> expressing <i>B. pseudomallei</i> -like capsular polysaccharide in Thailand, and their associations with serological response to <i>B. pseudomallei</i> . PLoS Negl Trop Dis. 2018; 12(1): e0006193.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	20. Ong CEL, Wongsuvan G, Chew JSW, Kim TY, Teng LH, Amornchai P, Wuthiekanun V, Day NPJ, Peacock SJ, Cheng TY, Yap EPH, Limmathurotsakul D. Presence of <i>Burkholderia pseudomallei</i> in Soil and Paddy Rice Water in a Rice Field in Northeast Thailand, but Not in Air and Rainwater. Am J Trop Med Hyg. 2017; 97(6):1702-5.	12/1	2017

Current Teaching Load

TMID	513	Biostatistics	2 (2-0-4)
TMID	544	Research Methodology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMID	544	Research Methodology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

5. Name: Associate Professor Dr. Dorn Watthanakulpanich

Education

Degree	Degree Name	Institute	Year
Ph.D.	Biomolecular Sciences	Liverpool John Moores University, UK	2009
M.D.	-	Mahidol University	2002
M.Sc.	Tropical Medicine	Mahidol University	1995
B.Sc.	Medical Technology	Chiangmai University	1988

Affiliation: Department of Helminthology, Faculty of Tropical Medicine, Mahidol University

Interested research/ expertise Prevalence of helminths, Clinical manifestations, Drug trials of helminthic infections

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1.Pothong K, Komalamisra C, Kalambaheti T, Watthanakulpanich D , Yoshino TP, Dekumyoy P. ELISA based on a recombinant <i>Paragonimus heterotremus</i> protein for serodiagnosis of human paragonimiasis in Thailand. Parasit Vectors. 2018; 11: 322.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Phuphisut O, Ajawatanawong P, Limpanont Y, Reamtong O, Nuamtanong S, Ampawong S, Chaimon S, Dekumyoy P, Watthanakulpanich D , Swierczewski BE, Adisakwattana P. Transcriptomic analysis of male and female <i>Schistosoma mekongi</i> adult worms. <i>Parasit Vectors</i> . 2018 Sep 10;11(1):504.	12/1	2018
Journal articles	3 Mengying Z, Yiyue X, Tong P, Yue H, Limpanont Y, Ping H, Okanurak K, Yangi W, Dekumyoy P, Hongli Z, Watthanakulpanich D , Zhongdao W, Zhi W, Zhiyue L. Apoptosis and necroptosis of mouse hippocampal and parenchymal astrocytes, microglia and neurons caused by <i>Angiostrongylus cantonensis</i> infection. <i>Parasit Vec</i> . 2017; 10: 611.	12/1	2017
Journal articles	4 Shama C, Piyaphanee W, Watthanakulpanich D . Case report: Clinical features of intermittent migratory swelling caused by gnathostomiasis with complete follow-up. <i>Am J Trop Med Hyg</i> . 2017; 97:1611-15.	12/1	2017

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	5. Sitharungsil R, Watthanakulpanich D. <i>Taenia Saginata</i> infection in a 14-month-old toddler. Southeast Asian J Trop Med Public Health. 2016 May;47(3):394-8.	12/1	2017

Current Teaching Load

TMSH	501	Health Issues in School	3 (3-0-6)
TMSH	504	School Health Development	2 (1-2-3)
TMSH	505	School Health Management	2 (0-4-2)
TMSH	510	School Health Seminar	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	512	Health Issues in Schools	3 (3-0-6)
TMSH	504	School Health Development	2 (1-2-3)
TMSH	505	School Health Management	2 (0-4-2)
TMSH	514	School Health Seminars	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	518	Instructional Media Design for School Health Promotions	2 (1-2-3)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

6. Name: Associate Professor Dr. Karunee Kwanbunjan

Education

Degree	Degree Name	Institute	Year
Dr. oec. troph.	Nutrition and Food Sciences	Justus Liebig University, Germany	1996
M.Sc.	Tropical Medicine	Mahidol University	1984
B.Sc.	Biology	Kasetsart University	1981

Affiliation: Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine, Mahidol University

Interested research/ expertise

Epidemiological and biochemical nutrition, Food safety

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Kwanbunjan K , Panprathip P, Phosat C, Chumpathat N, Wechjakwen N, Puduang S, et al. Association of retinol binding protein 4 and transthyretin with triglyceride levels and insulin resistance in rural thais with high type 2 diabetes risk. BMC Endocr Disord. 2018; 18: 26.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Phosat C, Panprathip P, Chumpathat N, Prangthip P, Chantratita N, Soonthornworasiri N, Puduang S, Kwanbunjan K . Elevated C-reactive protein, interleukin 6, tumor necrosis factor alpha and glycemic load associated with type 2 diabetes mellitus in rural Thais: a cross-sectional study. BMC Endocr Disord. 2017; 17: 44.	12/1	2017
Journal articles	3. Chumpathat N, Rangsin R, Changbumrung S, Soonthornworasiri N, Durongritichai V, Kwanbunjan K . Use of knee height for the estimation of body height in Thai adult women. Asia Pac J Clin Nutr. 2016; 25(3): 444-51.	12/1	2016
Journal articles	4. Khuntamoon T, Thepouyporn A, Kaewprasert S, Prangthip P, Pooudoung S, Chaisri U, Maneesai P, Kwanbunjan K . Thai generic-brand dry canine foods: mutagenicity and the effects of feeding <i>in vivo</i> and <i>in vitro</i> . BMC Vet Res. 2016; 20: 17.	12/1	2016

Current Teaching Load

TMSH	506	Nutrition Principles for School Children	2 (2-0-4)
TMSH	507	Health Food for School Children	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	513	Nutrition Principles for School Children	2 (2-0-4)
TMSH	516	Food for School Children	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

7. Name: Associate Professor Dr. Kraichat Tantrakarnapa

Education

Degree	Degree Name	Institute	Year
Ph.D.	Environmental Engineering	Suranaree University of Technology	2003
M.Sc.	Technology of Environmental Management	Mahidol University	1990
B.S.	Statistics	Chiangmai University	1985

Affiliation: Department of Social and Environmental Medicine, Faculty of Tropical Medicine, Mahidol University

Interested research/ expertise

Environmental Health Impact Assessment, Environmental Management System, Environmental Health

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Tantrakarnapa K , Buttransri A, Silapanunthakul S, Silwan T, Kliengchuay W, Sillaparassamee R. GREEN Community; case study of community nearby industrial sector of Rayong province. <i>Social Science Asia J.</i> 2018;4:66-76.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Kliengchuay W, Cooper Meeyai A, Worakhunpiset S, Tantrakarnapa K. Relationships between Meteorological parameters and particulate matter in Mae Hong Son province, Thailand. Int J Environ Res Public Health. 2018 Dec 10;15(12). pii: E2801.	12/1	2018
Journal articles	3. Ruchiraset A, Tantrakarnapa K. Time series modeling of pneumonia admissions and its association with air pollution and climate variables in Chiang Mai province, Thailand. Environ Sci Pollut Res Int. 2018;25(33):33277-85.	12/1	2018
Journal articles	4. Intarakul J, Tantrakarnapa K, Chartpitak P, Inbamrung P, Pradit P, Nanan E. Health impact assessment for local authority staff from chemical exposure: case study of DHF host management at Office of Disease Prevention and Control Region 4, Ratchaburi. Dis Cont J 2018 Jan-Mar;44(1): 77-91	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	5. Sahanavin N, Prueksasit T, Tantrakarnapa K . Relationship between PM(10) and PM(2.5) levels in high-traffic area determined using path analysis and linear regression. J Environ Sci (China). 2018; 69: 105-14.	12/1	2018
Journal articles	6. Tosepu R, Tantrakarnapa K , Nakhapakorn K, Worakhunpiset S. Climate variability and dengue hemorrhagic fever in Southeast Sulawesi Province, Indonesia. Environ Sci Pollut Res Int. 2018; 25(15): 14944-52.	12/1	2018
Journal articles	7. Tosepu R, Tantrakarnapa K , Worakhunpiset S, Nakhapakorn K. Climatic Factors Influencing Dengue Hemorrhagic Fever in Kolaka District, Indonesia. Environ Nat Resour J. 2018; 16(2): 1-10	12/1	2018
Journal articles	8. Sudsandee S, Tantrakarnapa K , Tharnpoophasiam P, Limpanont Y, Mingkhwan R, Worakhunpiset S. Evaluating health risks posed by heavy metals to humans consuming blood cockles (<i>Anadara granosa</i>) from the Upper Gulf of Thailand. Environ Sci Pollut Res Int. 2017; 24(17): 14605-15.	12/1	2017

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	9. Silapanuntakul S, Intrarasaksit P, Vatanasomboon P, Tantrakarnapa K . Uptake of copper and zinc in lettuce (<i>Lactuca sativa</i> L.) planted in sida soil and Ignite bottom aAsh mixtures. NUJST. 2017; (25)3:31-42.	12/1	2017
Journal articles	10. Sahanavin N, Tantrakarnapa K , Prueksasit T. Ambient and PM concentrations at different high traffic-related street configurations In Bangkok, Thailand. Southeast Asian J Trop Med Public Health. 2016; 47(3): 528-35.	12/1	2016

Current Teaching Load

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	524	Fundamentals of Environmental Health and Toxicology	2 (2-0-4)
TMSH	528	Environmental Management	2 (2-0-4)
TMSE	529	Principle of Environmental Biotechnology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	524	Principles of Environmental Health and Toxicology	2 (2-0-4)
TMSH	528	Environmental Management	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

8. Name: Associate Professor Kriengsak Limkittikul

Education

Degree	Degree Name	Institute	Year
Dip. Thai Board of Tropical Medicine and Hygiene		Mahidol University	2006
Dip. Thai Board of Family Medicine		Thai Medical Council	2003
Diploma of Virology		Nagasaki University, JAPAN	2001
Diploma Thai Board of Pediatrics		Khonkaen University	1999
M.D.		Mahidol University	1995

Affiliation: Department of Tropical Pediatric, Faculty of Tropical Medicine, Mahidol University

Interested research/ expertise

1. Pediatric infectious disease
2. Vaccine research

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Geretz A, Ehrenberg PK, Bouckennooghe A, Fernández Viña MA, Michael NL, Chansinghakule D, Limkittikul K , et al. Full-length next-generation sequencing of HLA class I and II genes in a cohort from Thailand. Hum Immunol. 2018; S0198-8859(18): 30860-7.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Chanthavanich P, Limkittikul K , Sirivichayakul C, Chokejindachai W, Hattasingh W, Pengsaa K, et al. Immunogenicity and safety of inactivated chromatographically purified Vero cell-derived Japanese encephalitis vaccine in Thai children. Hum Vaccin Immunother. 2018; 14(4): 900-5.	12/1	2018
Journal articles	3. Chatchen S, Ibrahim S, Wisetsing P, Limkittikul K . Long-Term protective rabies antibodies in Thai children after pre-exposure rabies vaccination. Southeast Asian J Trop Med Public Health. 2017; 48(2): 306-12.	12/1	2017
Journal articles	4. Yamagishi J, Runtuwene LR, Hayashida K, Mongan AE, Thi LAN, Thuy LN, Nhat CN, Limkittikul K , et al. Serotyping dengue virus with isothermal amplification and a portable sequencer. Sci Rep. 2017; 7(1): 3510.	12/1	2017

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	5. Rattanamahaphoom J, Leaungwutiwong P, Limkittikul K , Kosoltanapiwat N, Srikaitkhachorn A. Activation of dengue virus-specific T cells modulates vascular endothelial growth factor receptor 2 expression. Asian Pac J Allergy Immunol. 2017; 35(3): 171-178.	12/1	2017
Journal articles	6. Sirivichayakul C, Chanthavanich P, Limkittikul K , Siegrist CA, Wijagkanalan W, Chinwangso P, et al. Safety and immunogenicity of a combined Tetanus, Diphtheria, recombinant acellular Pertussis vaccine (TdaP) in healthy Thai adults. Hum Vaccin Immunother. 2017; 13(1): 136-143.	12/1	2017
Journal articles	7. Dhole P, Nakayama EE, Saito A, Limkittikul K , Phanthanawiboon S, Shioda T, et al. Sequence diversity of dengue virus type 2 in brain and thymus of infected interferon receptor ko mice: implications for dengue virulence. Virol J. 2016; 13(1): 199.	12/1	2016

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	8. Plennevaux E, Sabchareon A, Limkittikul K , Chanthavanich P, Sirivichayakul C, Moureau A, et al. Detection of dengue cases by serological testing in a dengue vaccine efficacy trial: Utility for efficacy evaluation and impact of future vaccine introduction. Vaccine. 2016; 34(24): 2707-12.	12/1	2016
Journal articles	9. Phanthanawiboon S, Limkittikul K , Sakai Y, Takakura N, Saijo M, Kurosu T. Acute Systemic Infection with Dengue virus leads to vascular leakage and death through tumor necrosis factor- α and Tie2/angiopoietin signaling in mice lacking type I and II interferon receptors. PLoS One. 2016; 11(2): e0148564.	12/1	2016

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

9. Name: Associate Professor Dr. Paron Dekumyoy

Education

Degree	Degree Name	Institute	Year
Ph.D.	Tropical Medicine	Mahidol University	2003
M.Sc.	Tropical Medicine	Mahidol University	1985
B.Sc.	Biology	Ramkhamhaeng University	1980

Affiliation: Department of Helminthology, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

1. Molecular biology
2. Parasitology

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Chaisiri K, Dusitsittipon S, Panitvong N, Ketboonlue T, Nuamtanong S, Thaenkham U, Morand S, Dekumyoy P . Distribution of the newly invasive New Guinea flatworm <i>Platydemus manokwari</i> (Platyhelminthes: Geoplanidae) in Thailand and its potential role as a paratenic host carrying <i>Angiostrongylus malaysiensis</i> larvae. J Helminthol. 2018; 20:1-9.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Phuphisut O, Ajawatanawong P, Limpanont Y, Reamtong O, Nuamtanong S, Ampawong S, Chaimon S, Dekumyoy P , et al. Transcriptomic analysis of male and female <i>Schistosoma mekongi</i> adult worms. Parasit Vectors. 2018;11(1):504.	12/1	2018
Journal articles	3. Chaisiri K, Kusolsuk T, Homsuwan N, Sanguankiat S, Dekumyoy P , Peunpipoom G, et al. Co-occurrence of swine cysticercosis due to <i>Taenia solium</i> and <i>Taenia hydatigena</i> in ethnic minority villages at the Thai-Myanmar border. J Helminthol. 2018; 28:1-9.	12/1	2018
Journal articles	4. Thiangtrongjit T, Adisakwattana P, Limpanont Y, Dekumyoy P , Nuamtanong S, Chusongsang P, et al. Proteomic and immunomic analysis of <i>Schistosoma mekongi</i> egg proteins. Exp Parasitol. 2018; 191: 88-96.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	5. Pothong K, Komalamisra C, Kalambaheti T, Watthanakulpanich D, Yoshino TP, Dekumyoy P . ELISA based on a recombinant <i>Paragonimus heterotremus</i> protein for serodiagnosis of human paragonimiasis in Thailand. Parasit Vectors. 2018; 11(1): 322.	12/1	2018
Journal articles	6. Mengying Z, Yiyue X, Tong P, Yue H, Limpanont Y, Ping H, Okanurak K, Yanqi W, Dekumyoy P , et al. Apoptosis and necroptosis of mouse hippocampal and parenchymal astrocytes, microglia and neurons caused by <i>Angiostrongylus cantonensis</i> infection. Parasit Vectors. 2017; 10(1): 611.	12/1	2017
Journal articles	7. Wuhao L, Ran C, Xujin H, Zhongdao W, Dekumyoy P , Zhiyue L. Parasites and asthma. Parasitol Res. 2017; 116(9): 2373-2383.	12/1	2017
Journal articles	8. Thaenkham U, Phuphisut O, Nuamtanong S, Yoonuan T, Sa-Nguankiat S, Vonghachack Y, Belizario VY, Dung DT, Dekumyoy P , et al. Genetic differences among <i>Haplorchis taichui</i> populations in Indochina revealed by mitochondrial COX1 sequences. J Helminthol. 2017; 91(5): 597-604.	12/1	2017

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

10. Name: Associate Professor Dr. Suwalee Worakhunpiset**Education**

Degree	Degree Name	Institute	Year
Ph.D.	Tropical Medicine	Mahidol University	2004
M.Sc.	Technology of Environmental Management	Mahidol University	1996
B.N.S.	Nursing	Mahidol University	1991

Affiliation: Department of Social and Environmental Medicine, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

Environmental Health, Environmental Toxicology, Environmental Management, Health Risk Assessment

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 years

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	1. Sudsandee S, Hu CC, Lui YL, Worakhunpiset S , Loahaprapanon S, Hung WS, Lee KR, Lai JY. Improving barrier performance of transparent polymeric film using silk nanofibril combine graphene oxide. Journal of Taiwan Institute of Chemical Engineers. 2019; 95:332-340.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	2. Chienwichai P, Reamtong O, Boonyuen U, Pisitkun T, Somparn P, Tharnpoophasiam P, Worakhunpiset S , Topanurak S. Hepatic protein carbonylation profiles induced by lipid accumulation and oxidative stress for investigating cellular response to non-alcoholic fatty liver disease in vitro. Proteome Sci. 2019 Mar 27;17:1.	12/1	2019
Journal articles	3. Kliengchuay W, Cooper Meeyai A, Worakhunpiset S , Tantrakarnapa K. Relationships between meteorological Parameters and particulate matter in Mae Hong Son Province, Thailand. Int J Environ Res Public Health. 2018 Dec 10;15(12). pii: E2801.	12/1	2018
Journal articles	4. Mingkhwan R, Worakhunpiset S . Heavy Metal Contamination Near Industrial estate areas in Phra Nakhon Si Ayutthaya Province, Thailand and human health risk assessment. Int J Environ Res Public Health. 2018 Aug 31;15(9). pii: E1890.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	5. Worakhunpiset S. Trace elements in marine sediment and organisms in the Gulf of Thailand. Int J Environ Res Public Health. 2018;15:810.	12/1	2018
Journal articles	6. Tosepu R, Tantrakarnapa K, Worakhunpiset S , Nakhapakorn K . Climatic factors influencing Dengue Hemorrhagic Fever in Lolaka District, Indonesia .Environ Nat Resour J .2018; 16 :1-10.	12/1	2018
Journal articles	7. Tosepu R, Tantrakarnapa K, Nakhapakorn K, Worakhunpiset S. Climate variability and Dengue hemorrhagic fever in Southeast Sulawesi Province, Indonesia. Environ Sci Pollut Res. 2018; 5:14944-52.	12/1	2018
Journal articles	8. Chienwichai P, Topanurak S, Reamtong O, Boonyuen U, Worakhunpiset S , Tharnpoophasiam P. Effects of low bisphenol A concentration on protein expression profiles in an in vitro model of non-alcoholic fatty liver disease. Mol Cell Toxicol. 2018; 14:61-72.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	9. Sudsandee S, Tantrakarnapa K, Tharnpoophasiam P, Limpanont Y, Mingkhwan R, Worakhunpiset S. Evaluating health risk posed by heavy metals to humans consuming blood cockle (<i>Anadara granosa</i>) from the Upper Gulf of Thailand. Environ Sci Pollut Res. 2017; 24: 14605-15.	12/1	2017

Current Teaching Load

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	504	School Health Development	2 (1-2-3)
TMSH	524	Fundamentals of Environmental Health and Toxicology	2 (2-0-4)
TMSH	528	Environmental Management	2 (2-0-4)
TMSE	529	Principle of Environmental Biotechnology	2 (2-0-4)
TMSH	510	School Health Seminar	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	504	School Health Development	2 (1-2-3)
TMSH	524	Printciples of Environmental Health and Toxicology	2 (2-0-4)
TMSH	528	Environmental Management	2 (2-0-4)
TMSH	514	School Health Seminars	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	518	Instructional Media Design for School Health Promotion	2 (1-2-3)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

The Mahidol University Council has approved the adjusted program in its 552nd meeting on January 15, 2020

11. Name: Associate Professor Dr. Thareerat Kalambaheti

Education

Degree	Degree name	Institute	Year
Ph.D.	Microbiology	Monash University, Australia	2000
M.Sc.	Microbiology	University of New South Wales, Australia	1991
B.Sc.	Microbiology	Chulalongkorn University	1982

Affiliation: Department of Microbiology and Immunology, Faculty of Tropical, Medicine, Mahidol University

Interesting Research Topics or Specialties

Molecular typing of bacteria; Production of recombinant protein for diagnosis.

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Tunyong W, Hattasingh W, Mahakunkijcharoen Y, Kalambaheti T . Immunogenicity Induced by the Heptavalent pneumococcal conjugate vaccine among thai children at high risk for severe pneumococcal disease pediatrics & health research. 2018; 3: 5.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Kumkrong K, Chankate P, Tonyoung W, Intarapuk A, Kerdsin A, Kalambaheti T . Multilocus variable-number tandem repeat analysis of <i>Brucella</i> isolates from Thailand Southeast Asian J Trop Med Public Health. 2017; 48(1): 124-42.	12/1	2017
Journal articles	. 3. Chawjiraphan W, Sonthayanon P, Chanket P, Benjathummarak S, Kerdsin A, Kalambaheti T . Multilocus Sequence typing of <i>Brucella</i> isolates from Thailand Southeast Asian J Trop Med Public Health. 2016; 47(6): 1270-87.	12/1	2016

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	510	School Health Seminar	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	514	School Health Seminars	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

12. Name: Assistant Professor Dr. Dumrongkiet Arthan

Education

Degree	Degree Name	Institute	Year
Ph.D.	Biochemistry	Mahidol University	2003
M.Sc.	Biochemistry	Mahidol University	1996
B.Sc.	Biochemistry	Chulalongkorn University	1992

Affiliation: Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

Biochemical Nutrition, School health, Biochemistry

Publication that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Paratthakonkun C, Kaewprasert S, Arthan D , Soonthornworasiri N, Prangthip P, Wongsutthilerd A, et al. Associations among serum folate, waist-to-hip ratio, lipid profile, and eating habits in an elderly Thai population. Int J for Vit and Nutr Res. 2019; 15: 1-9.	12/1	2019
Journal articles	2. Phoeurk C, Somana J, Sornwatana T, Udompaisarn S, Traewachiwiphak S, Sirichaiyakul P, Phongsak T, Arthan D . Three novel mutations in α -galactosidase gene involving in galactomannan degradation in endosperm of curd coconut. Phytochemistry. 2018; 156: 33-42.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	3.Norbu W, Wangdi U, Dorji D, Arthan D , Soonthornworasiri N, Maneekan P, et al. Obesity prevalence and contributing factors among adolescents in secondary schools in Pemagatshel district, Bhutan. Int J Adolesc Med Health. 2017; 18: 31(1).	12/1	2017
Journal articles	4.Udompaisarn S, Arthan D , Somana J. Development and Validation of an Enzymatic Method To Determine Stevioside Content from <i>Stevia rebaudiana</i> . J Agric Food Chem. 2017; 65(15): 3223-9.	12/1	2017
Journal articles	5. Mosikanon K, Arthan D , Kettawan A, Tungtrongchitr R, Prangthip P. Yeast β -Glucan Modulates Inflammation and Waist Circumference in Overweight and Obese Subjects. J Diet Suppl. 2017; 14(2): 173-85.	12/1	2017
Journal articles	6.Puangpet T, Paratthakonkun C, Soonthornworasiri N, Wattanapisit A, Arthan D . Situation and Trend of Samutsakhon Hospital Visits among Thai and Myanmar Patients between 2012 and 2016. Journal of Nakhonping Hospital 2017; 8: 34-48.	11/0.4	2017
Journal articles	7. Suthangkornkul R, Sriworanun P, Nakai H, Okuyama M, Svasti J, Kimura A, Senapin S, Arthan D . A <i>Solanum torvum</i> GH3 β -glucosidase expressed in <i>Pichia pastoris</i> catalyzes the hydrolysis of furostanol glycoside. Phytochemistry. 2016; 127: 4-11.	12/1	2016

Current Teaching Load

TMSH	501	Health Issues in School	3 (3-0-6)
TMSH	504	School Health Development	2 (1-2-3)
TMSH	505	School Health Management	2 (0-4-2)
TMSH	506	Nutrition Principles for School Children	2 (2-0-4)
TMSH	507	Food in School Children	2 (2-0-4)
TMSH	510	School Health Seminar	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	512	Health Issues in Schools	3 (3-0-6)
TMSH	504	School Health Development	2 (1-2-3)
TMSH	505	School Health Management	2 (0-4-2)
TMSH	513	Nutrition Principles for School Children	2 (2-0-4)
TMSH	516	Food for School Children	2 (2-0-4)
TMSH	514	School Health Seminars	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	518	Instructional Media Design for School Health Promotions	2 (1-2-3)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

13. Name: Assistant Professor Dr. Jittima Dhitavat**Education**

Degree	Degree Name	Institute	Year
Dip. Thai Board of Epidemiology (Travel Medicine)		Thai Medical Council	2013
D.Phil.	Clinical Medicine	University of Oxford, UK	2003
Dip.	Dermatology	Thai Medical Council	1995
M.Sc.	Internal Medicine	Chulalongkorn University	1992
M.D. (Honors),	-	Prince of Songkla University	1989

Affiliation: Department of Clinical Tropical Medicine, Faculty of Tropical Medicine,
Mahidol University

Interesting Research Topics or Specialties

1. Dermatology
2. HIV
3. Mycology

Publication that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Sricharoenchai S, Sirivichayakul C, Chokeyhaibulkit K, Pitisuttithum P, Dhitavat J , Pitisuthitham A, et al. A genetically inactivated two-component acellular pertussis vaccine, alone or combined with tetanus and reduced-dose diphtheria vaccines, in adolescents: a phase 2/3, randomised controlled non-inferiority trial. Lancet Infect Dis. 2018; 18(1): 58-67.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Rampakakis E, Stutz M, Kawai K, Tsai TF, Cheong HJ, Dhitavat J , et al. Association between work time loss and quality of life in patients with Herpes Zoster: a pooled analysis of the MASTER studies. Health Qual Life Outcomes. 2017; 15(1): 11.	12/1	2017
Journal articles	3. Pitisuttithum P, Islam D, Chamnanchanunt S, Ruamsap N, Khantapura P, Kaewkungwal J, Kittitrakul C, Luvira V, Dhitavat J , et al. Clinical Trial of an Oral Live Shigella sonnei Vaccine Candidate, WRSS1, in Thai Adults. Clin Vaccine Immunol. 2016; 23(7): 564-75.	12/1	2016
Journal articles	4. Martinez Vega R, Phumratanaprapin W, Phonrat B, Dhitavat J , Sutherat M, Choovichian V. Differences in Liver Impairment Between Adults and Children with Dengue Infection. Am J Trop Med Hyg. 2016; 94(5): 1073-9.	12/1	2016

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

14. Name: Assistant Professor Dr. Kobporn Boonnak

Education

Degree	Degree Name	Institute	Year
Ph.D.	Microbiology	Mahidol University	2008
M.Sc.	Immunology	Mahidol University	2000
B.Sc.	Biochemistry and Biochemical Technology	Chiangmai University	1992

Affiliation: Department of Microbiology and Immunology, Faculty of Tropical Medicine,
Mahidol University

Interesting Research Topics or Specialties

1. Virus
2. Immunology

Publication that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1. Pitisuttithum P, Chokephaibulkit K, Sirivichayakul C, Sricharoenchai S, Dhitavat J, Pitisuthitham A, Phongsamart W, Boonnak K , et al. Antibody persistence after vaccination of adolescents with monovalent and combined acellular pertussis vaccines containing genetically inactivated pertussis toxin: a phase 2/3 randomised, controlled, non-inferiority trial. Lancet Infect Dis. 2018;18(11):1260-8.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Monmaturapoj N, Sri-On A, Klinsukhon W, Boonnak K , Prahsarn C. Antiviral activity of multifunctional composite based on TiO(2)-modified hydroxyapatite. Mater Sci Eng C Mater Biol Appl. 2018; 92: 96-102.	12/1	2018
Journal articles	3. Sricharoenchai S, Sirivichayakul C, Chokeyphaibulkit K, Pitisuttithum P, Dhitavat J, Pitisuthitham A, Phongsamart W, Boonnak K , et al. A genetically inactivated two-component acellular pertussis vaccine, alone or combined with tetanus and reduced-dose diphtheria vaccines, in adolescents: a phase 2/3, randomised controlled non-inferiority trial. Lancet Infect Dis. 2018; 18(1): 58-67.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	4. Lamichhane PP, Boonnak K , Changsom D, Noisumdaeng P, Sangsiriwut K, Pattanakitsakul SN, et al. H5N1 NS genomic segment distinctly governs the influenza virus infectivity and cytokine induction in monocytic cells. Asian Pac J Allergy Immunol. 2018 ;36(1): 58-68.	12/1	2017
Journal articles	5. Boonnak K , Dhitavat J, Thantamnu N, Kosoltanapiwat N, Auayporn M, Jiang L, et al. Immune responses to intradermal and intramuscular inactivated influenza vaccine among older age group. Vaccine. 2017; 35(52): 7339-46.	12/1	2017
Journal articles	6. Pitisuttithum P, Boonnak K , Chamnanchanunt S, Puthavathana P, Luvira V, Lerdsamran H, et al. Safety and immunogenicity of a live attenuated influenza H5 candidate vaccine strain A/17/turkey/Turkey/05/133 H5N2 and its priming effects for potential pre-pandemic use: a randomised, double-blind, placebo-controlled trial. Lancet Infect Dis. 2017; 17(8): 833-842.	12/1	2017

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	7. Boonnak K , Matsuoka Y, Wang W, Suguitan AL, Chen Z, Paskel M, et al. Development of Clade-Specific and Broadly Reactive Live Attenuated Influenza Virus Vaccines against Rapidly Evolving H5 Subtype Viruses. J Virol. 2017; 91(15): e00547-17.	12/1	2017

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

15. Name: Assistant Professor Dr. Ngamphol Soonthornworasiri

Education

Degree	Degree Name	Institute	Year
Ph.D.	Mathematics	Mahidol University	2008
M.Sc.	Applied Mathematics	Mahidol University	2003
B.Sc.	Mathematics	Mahidol University	2000

Affiliation: Department of Tropical Hygiene, Faculty of Tropical Medicine, Mahidol University.

Interesting Research Topics or Specialties

1. Statistical Modeling
2. Statistical Inference
3. Bayesian Analysis
4. Time Series Model

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	1.Mahikul W, White LJ, Poovorawan K, Soonthornworasiri N , Sukontamarn P, Chanthavilay P, Pan-Ngum W, Medley GF. A Population Dynamic Model to Assess the Diabetes Screening and Reporting Programs and Project the Burden of Undiagnosed Diabetes in Thailand. Int J Environ Res Public Health. 2019 Jun 21;16(12).	12/1	2019

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Pisutsan P, Soonthornworasiri N , Matsee W, Phumratanaprapin W, Punrin S, Leowattana W, Mansanguan C, Leshem E, Piyaphanee W. Incidence of health problems in travelers to Southeast Asia: A prospective cohort study. J Travel Med. 2019 Jun 20.	12/1	2019
Journal articles	Mahikul W, White LJ, Poovorawan K, Soonthornworasiri N , Sukontamarn P, Chanthavilay P, Medley GF, Pan-Ngum W. Modelling population dynamics and seasonal movement to assess and predict the burden of melioidosis. PLoS Negl Trop Dis. 2019 May 9;13(5):e0007380.	12/1	2019
Journal articles	3.Paratthakonkun C, Kaewprasert S, Arthan D, Soonthornworasiri N , Tungtrongchitr R, Prangthip P, Wongsutthilerd A, Pooudoung S, Chantaranipapong Y, Nakosiri W, Aroonnuat A, Chupeerach C, Chanchai S, Nana A. Associations among serum folate, waist-to-hip ratio, lipid profile, and eating habits with homocysteine in an elderly Thai population. Int J Vitam Nutr Res. 2019; 15 :1-9.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	4.Htun YM, Khaing TMM, Aung NM, Yin Y, Myint Z, Aung ST, Soonthornworasiri N , Silachamroon U, Kasetjaroen Y, Kaewkungwal J. Delay in treatment initiation and treatment outcomes among adult patients with multidrug-resistant tuberculosis at Yangon Regional Tuberculosis Centre, Myanmar: A retrospective study. PLoS One. 2018; 13 : e0209932.	12/1	2018
Journal articles	5: Htun YM, Khaing TMM, Yin Y, Myint Z, Aung ST, Hlaing TM, Soonthornworasiri N , Silachamroon U, Kasetjaroen Y, Kaewkungwal J. Delay in diagnosis and treatment among adult multidrug resistant tuberculosis patients in Yangon Regional Tuberculosis Center, Myanmar: a cross-sectional study. BMC Health Serv Res. 2018; 18: 878.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	6: Suwanmanee S, Surasombatpattana P, Soonthornworasiri N , Hamel R, Maneekan P, Missé D, Luplertlop N. Monitoring arbovirus in Thailand: Surveillance of dengue, chikungunya and zika virus, with a focus on coinfections. Acta Trop. 2018; 188: 244-250.	12/1	2018
Journal articles	7. Phosat C, Panprathip P, Chumpathat N, Prangthip P, Chantratita N, Soonthornworasiri N , et al. Elevated C-reactive protein, interleukin 6, tumor necrosis factor alpha and glycemic load associated with type 2 diabetes mellitus in rural Thais: a cross-sectional study. BMC Endocr Disord. 2017; 17: 44.	12/1	2017
Journal articles	8.Charatcharoenwiththaya P, Soonthornworasiri N , Karaketklang K, Poovorawan K, Pan-Ngum W, Chotiyaputta W, et al. Factors affecting mortality and resource use for hospitalized patients with cirrhosis: A population-based study. Medicine (Baltimore). 2017; 96: e7782.	12/1	2017

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	3.Norbu W, Wangdi U, Dorji D, Arthan D , Soonthornworasiri N, Maneekan P, et al. Obesity prevalence and contributing factors among adolescents in secondary schools in Pemagatshel district, Bhutan. Int J Adolesc Med Health. 2017; 18: 31(1).	12/1	2017
Journal articles	10. Treeprasertsuk S, Poovorawan K, Soonthornworasiri N, Chaiteerakij R, Thanapirom K, Mairiang P, Sawadpanich K, Sonsiri K, Mahachai V, Phaosawasdi K. A significant cancer burden and high mortality of intrahepatic cholangiocarcinoma in Thailand: a nationwide database study. BMC Gastroenterol. 2017; 17 :3	12/1	2017
Journal articles	11. Sa-angchai P, Phienphommalin S, Yimsamran S, Kaewkungwal J, Kijsanayotin B, Soonthornworasiri N . Geographical Distribution of Health Workforces In Lao PDR .Southeast Asian J Trop Med Public Health. 2016; 47: 868-79.	12/1	2016

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	12. Poovorawan K, Pan-Ngum W, Soonthornworasiri N , Kulrat C, Kittitrakul C, Wilairatana P, et al. Burden of Liver Abscess and Survival Risk Score in Thailand: A Population-Based Study. Am J Trop Med Hyg . 2016; 95: 683-8.	12/1	2016
Journal articles	13. Chumpathat N, Rangsin R, Changbumrung S, Soonthornworasiri N , Durongritichai V, Kwanbunjan K. Use of knee height for the estimation of body height in Thai adult women. Asia Pacific J Clin Nut.2016; 25: 444-51.	12/1	2016
Journal articles	14. Ma S, Lawpoolsri S, Soonthornworasiri N , Khamsiriwatchara A, Jandee K, Taweeseeneepitch K, et al. Effectiveness of implementation of electronic malaria information system as the national malaria surveillance system in Thailand . JMIR Public Health Surveill . 2016; 6: 2(1): e20.	12/1	2016

Current Teaching Load

TMID	513	Biostatistics	2 (2-0-4)
TMID	544	Research Methodology	2 (2-0-4)
TMSH	510	School Health Seminar	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	514	School Health Seminars	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	515	Epidemiology and Biostatistics in School Health	2 (2-0-4)
TMID	544	Research Methodology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

16. Name: Assistant Professor Dr. Pattaneeya Prangthip

Education

Degree	Degree Name	Institute	Year
Ph.D.	Nutrition	Mahidol University	2012
M.Sc.	Food Technology	University of New South Wales; Australia	2004
B.Sc.	Biotechnology	Silpakorn University	2000

Affiliation: Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine, Mahidol University

Interested research/ expertise: Nutritional Biochemistry, Nutritional factors on obesity, Nutritional factors on education outcomes

Publications that are not part of any degree study and are complied with the criteria for academic position appointment within 5 years

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	1.Udomkasemsab A, Prangthip P. High fat diet for induced dyslipidemia and cardiac pathological alterations in Wistar rats compared to Sprague Dawley rats. <i>Clín Investig Arterioscler</i> 2018; doi:10.1016/j.arteri.2018.09.004:	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	2. Udomkasemsab A, Ngamlert C, Adisakwattana P, Aroonnual A, Tungtrongchitr R, Prangthip P. Maoberry (<i>Antidesma bunius</i>) ameliorates oxidative stress and inflammation in cardiac tissues of rats fed a high-fat diet. BMC Complement Altern Med 2018;18: 344.	12/1	2018
Journal articles	3. Norbu W, Wangdi U, Dorji D, Arthan D , Soonthornworasiri N, Maneekan P, et al. Obesity prevalence and contributing factors among adolescents in secondary schools in Pemagatshel district, Bhutan. Int J Adolesc Med Health. 2017; 18: 31(1).	12/1	2018
Journal articles	4. Phosat C, Panprathip P, Chumpathat N, Prangthip P , Chantratita N, Soonthornworasiri N, Puduang S, Kwanbunjan K. Elevated C-reactive protein, interleukin 6, tumor necrosis factor alpha and glycemic load associated with type 2 diabetes mellitus in rural Thais: a cross-sectional study. BMC Endocr Dis. 2017; 17: 44.	12/1	2017

Publication types	Publication Names	Academic performance standard criteria/Weight	Years
Journal articles	5. Plaitho Y, Rattanasena P, Chaikham P, Prangthip P. Biochemical and Antioxidative Properties of Unprocessed and Sterilized White and Black Sesame By-product from Northern Thailand. Current Res Nutri Food Sci. 2017; 5: 196-205. of Maoberry (<i>Antidesma bunius</i> L.) Juice. Food Sci Tech Res. 2016; 22: 647-654.	12/1	2017
Journal articles	6. Prangthip P , Kettawan A, Posuwan J, Okuno M, Okamoto T. Prevention of oxidative stress in diabetic rats by ubiquinone-10 and ubiquinol-10 and bioavailability after short- and long-term coenzyme Q ₁₀ and ubiquinol-10 and bioavailability after short- and long-term coenzyme Q ₁₀ supplementation. J Diet Suppl. 2016; 13: 647-59.	12/1	2016
Journal articles	7. Mosikanon K, Arthan D, Kettawan A, Tungtrongjitr R, Prangthip P. Yeast β -glucan modulates inflammation and waist circumference in overweight and obese subjects. J Diet Suppl. 2016; 14: 173-85.	12/1	2016
Journal articles	8. Chaikham P, Prangthip P , Seesuriyachan P. Ultra-Sonication Effects on Quality Attributes supplementation. J Diet Suppl. 2016; 13: 647-59.	12/1	2016

Current Teaching Load

TMSH	504	School Health Development	2 (1-2-3)
TMSH	505	School Health Management	2 (0-4-2)
TMSH	506	Nutrition Principles for School Children	2 (2-0-4)
TMSH	507	Food in School Children	2 (2-0-4)
TMSH	510	School Health Seminar	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	504	School Health Development	2 (1-2-3)
TMSH	505	School Health Management	2 (0-4-2)
TMSH	513	Nutrition Principles for School Children	2 (2-0-4)
TMSH	516	Food in School Children	2 (2-0-4)
TMSH	514	School Health Seminars	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	518	Instructional Media Design for School Health Promotion	2 (1-2-3)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

17. Name: Assistant Professor Dr. Saranath Lawpoolsri Niyom

Education

Degree	Degree Name	Institute	Year
Ph.D.	Epidemiology	University of Maryland, Baltimore, USA	2009
Dip.	Tropical Medicine and Hygiene	Mahidol University	2003
M.D. (2 nd class honors)	-	Chulalongkorn University	2000

Affiliation: Department of Tropical Hygiene Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

1. The epidemiology of malaria and other tropical diseases
2. Spatial and mathematical modeling
3. Public health informatics

Publication that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	1. Lawpoolsri S , Sattabongkot J, Sirichaisinthop J, Cui L, Kiattibutr K, Rachaphaew N, Suk-Uam K, Khamsiriwatchara A, Kaewkungwal J. Epidemiological profiles of recurrent malaria episodes in an endemic area along the Thailand-Myanmar border: a prospective cohort study. Malar J. 2019; 18: 124.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2. Blanchard Rohner G, Chatzis O, Chinwangso P, Rohr M, Grillet S, Salomon C, Lemaître B, Boonrak P, Lawpoolsri S , Clutterbuck E, Poredi IK, Wijagkanalan W, Spiegel J, Pham HT, Viviani S, Siegrist CA. Boosting teenagers with acellular pertussis vaccines containing recombinant or chemically inactivated pertussis toxin: a randomized clinical trial. Clin Infect Dis. 2019 ;68: 1213-1222.	12/1	2019
Journal articles	3.Luvira V, Silachamroon U, Piyaphanee W, Lawpoolsri S , Chierakul W, Leungwutiwong P, Thawornkuno C, Wattanagoon Y. Etiologies of Acute Undifferentiated Febrile Illness in Bangkok, Thailand. Am J Trop Med Hyg. 2019;100: 622-629.	12/1	2019
Journal articles	4. Sa-Ngamuang C, Haddawy P, Luvira V, Piyaphanee W, Iamsirithaworn S, Lawpoolsri S . Accuracy of dengue clinical diagnosis with and without NS1 antigen rapid test: Comparison between human and Bayesian network model decision. PLoS Negl Trop Dis. 1. 2018; 12: e0006573.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	5. Pitisuttithum P, Boonnak K, Chamnanchanunt S, Puthavathana P, Luvira V, Lerdsamran H, Kaewkungwal J, Lawpoolsri S , et al. Safety and immunogenicity of a live attenuated influenza H5 candidate vaccine strain A/17/turkey/Turkey/05/133 H5N2 and its priming effects for potential pre-pandemic use: a randomised, double-blind, placebo-controlled trial. Lancet Infect Dis. 2017; 17(8): 833-42.	12/1	2017
Journal articles	6.Olanwjitwong J, Piyaphanee W, Poovorawan K, Lawpoolsri S , Chanthavanich P, Wichainprasast P, et al. Health problems among Thai tourists returning from India. J Travel Med. 2017; 24(4).	12/1	2017
Journal articles	7.Ma S, Lawpoolsri S , Soonthornworasiri N, Khamsiriwatchara A, Jandee K, Taweeseeneepitch K, et al. Effectiveness of Implementation of electronic malaria information system as the national malaria surveillance system in Thailand. JMIR Public Health Surveill. 2016; 2(1): e20.	12/1	2016

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	8.Canavati SE, Lawpoolsri S, Quintero CE, Nguon C, Ly P, Pukrittayakamee S, et al. Village malaria worker performance key to the elimination of artemisinin-resistant malaria: a Western Cambodia health system assessment. Malar J. 2016; 15(1): 282.	12/1	2016

Current Teaching Load

TMID	513	Biostatistics	2 (2-0-4)
TMID	544	Research Methodology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	515	Epidemiology and Biostatistics in School Health	2 (2-0-4)
TMID	544	Research Methodology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

18. Name: Assistant Professor Dr. Suchada Sumruayphol

Education

Degree	Degree Name	Institute	Year
Ph.D.	Tropical Medicine	Mahidol University	2009
M.Sc.	Appropriate Technology for Resources and Environmental Development	Mahidol University	2004
B.Sc.	Agriculture	Kasetsart University	2001

Affiliation: Department of Medical Entomology, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

1. Medical Entomology
2. Geometric morphometrics
3. Taxonomy
4. Vector Ecology
5. Molecular Biology

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1. Chaiphongpachara T, Sriwichai P, Samung Y, Ruangsittichai J, Morales Vargas RE, Cui L, Sattabongkot J, Dujardin JP, Sumruayphol S. Geometric morphometrics approach towards discrimination of three member species of Maculatus group in Thailand. Acta Trop. 2019; 192: 66-74.	12/1	2019
Journal articles	2. Sungvornyothin S, Kumlert R, Paris DH, Prasartvit A, Sonthayanon P, Apiwathnasorn C, Morand S, Stekolnikov AA, Sumruayphol S. Geometric morphometrics of the scutum for differentiation of trombiculid mites within the genus Walchia (Acariformes: Prostigmata: Trombiculidae), a probable vector of scrub typhus. Ticks Tick Borne Dis. 2019;10 : 495-503.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	3. Sumruayphol S , Chittsamart B, Polseela R, Sriwichai P, Samung Y, Apiwathnasorn C, et al. Wing geometry of <i>Phlebotomus stantoni</i> and <i>Sergentomyia hodgsoni</i> from different geographical locations in Thailand. C R Biol. 2017; 340: 195.	12/1	2017
Journal articles	4. Changbunjong T, Sumruayphol S , Weluwanarak T, Ruangsittichai J, Dujardin JP. Landmark and outline-based geometric morphometrics analysis of three Stomoxys flies (Diptera: Muscidae). 2016; 2016 Oct 24;63. pii: 2016.037.	12/1	2016
Journal articles	5. Sumruayphol S , Apiwathnasorn C, Ruangsittichai J, Sriwichai P, Attrapadung S, Samung Y, et al. DNA barcoding and wing morphometrics to distinguish three Aedes vectors in Thailand. Acta Trop. 2016; 159: 1-10.	12/1	2016
Journal articles	4. Sriwichai P, Samung Y, Sumruayphol S , Kiattibutr K, Kumpitak C, Payakkapol A, et al. Natural human <i>Plasmodium</i> infections in major Anopheles mosquitoes in western Thailand. Parasit Vectors. 2016; 9: 17	12/1	2016

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

19. Name: Assistant Professor Dr. Supaluk Popruk

Education

Degree	Degree Name	Institute	Year
Ph.D.	Tropical Medicine	Mahidol University	2007
B.Sc	Medical Technology	Naresuan University	2002

Affiliation: Department Protozoology, Faculty Tropical Medicine University Mahidol University

Interested research/expertise: Development and diagnosis the parasites especially intestinal protozoa, Genotyping and subtyping the pathogenic protozoa, Antiprotozoal activity of herbs against *Giardia duodenalis*

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 years

Publication types	Name	Academic performance standard criteria /Weights	Years
Journal articles	1. Udonsom R, Prasertbun R, Mahittikorn A, Mori H, Changbunjong T, Komalamisra C, Pintong A, Sukthana Y, Popruk S. <i>Blastocystis</i> infection and subtype distribution in humans, cattle, goats, and pigs in central and western Thailand. Infect Genet Evol. 2018; 65: 107-111.	12/1	2018
Journal articles	2. Pintong A, Sunyanusin S, Prasertbun R, Mahittikorn A, Mori H, Changbunjong T, Komalamisra C, Sukthana Y, Popruk S. <i>Blastocystis</i> subtype 5: Predominant subtype on pig farms, Thailand. Parasitol Int. 2018; 67(6): 824-828.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	3. Popruk S , Thima K, Udonsom R, Chiabchalard R, Mahittikorn A, Palakul K, et al. Activity of plant essential oils against <i>Giardia duodenalis</i> . Southeast Asian J Trop Med Public Health. 2017; 48(4): 756–61.	12/1	2018
Journal articles	4. Prasertbun R, Mori H, Pintong A, Sanyanusin S, Popruk S , Komalamisra C, et al. Zoonotic potential of <i>Enterocytozoon</i> genotypes in humans and pigs in Thailand. Vet Parasitol 2017; 233: 73-9.	12/1	2018
Journal articles	5. Mahittikorn A, Thammasonthijarern N, Roobthaisong A, Udonsom R, Popruk S , Siri S, et al. Development of a loop-mediated isothermal amplification technique and comparison with quantitative real-time PCR for the rapid visual detection of canine neosporosis. Parasit Vectors. 2017; 10(1): 394.	12/1	2018

Current Teaching Load

TMSH	510	School Health Seminar	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	515	School health Seminars	2 (2-0-4)
TMSH	511	Special Topic in School Health Based Research	2 (2-0-4)
TMSH	518	Instructional Media Design for School Health Promotions	2 (1-2-3)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

20. Name: Assistant Prof. Dr. Supawat Chatchen

Education

Degree	Degree Name	Institute	Year
Ph.D.	Molecular Genetics and Genetic Engineering	Mahidol University	2005
Dip. Thai Board of	Tropical Medicine and Hygiene	Mahidol University	2014
M.D.	-	Mahidol University	2008
B.Sc.	Medical Science	Mahidol University	1999

Affiliation: Department of Tropical Pediatric, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

1. Pediatric infectious disease
2. Vaccine research
3. Immunogenicity of Dengue infection

Publication that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 years

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	1. Srichan P, Niyom SL, Pacheun O, Iamsirithawon S, Chatchen S , Jones C, et al. Addressing challenges faced by insecticide spraying for the control of dengue fever in Bangkok, Thailand: a qualitative approach. Int Health. 2018; 10(5): 349-55.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria/Weights	Years
Journal articles	2. Chatchen S , Pongsakul N, Srisomsap C, Chiangjong W, Hongeng S, Svasti J, et al. Unravelling pathophysiology of crystalline nephropathy in ceftriaxone-associated acute kidney injury: A Cellular Proteomic Approach. Nephron. 2018; 139(1):70-82	12/1	2018
Journal articles	Chatchen S , Ibrahim S, Wisetsing P, Limkittikul K. Long-term protective rabies antibodies in Thai children after pre- exposure rabies vaccination. Southeast Asian J Trop Med Public Health. 2017; 48: 306-12.	12/1	2017
Journal articles	4. Chutipongtanate S, Chatchen S , Svasti J. Plasma prefractionation methods for proteomic analysis and perspectives in clinical applications. Proteomics Clin Appl. 2017; 11(7-8).	12/1	2017
Journal articles	5. Chatchen S , Sabchareon A, Sirivichayakul C. Serodiagnosis of asymptomatic dengue infection. Asian Pac J Trop Med. 2017; 10(1): 11-4.	12/1	2017

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)
TMSH	502	Diseases in School Children	3 (2-2-5)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

21. Name: Assistant Professor Weerawan Hattasingh

Education

Degree	Degree Name	Institute	Year
Diploma	Pediatrics infectious diseases	Thai Medical Council (Chulalongkorn university)	2009
Diploma	Pediatrics	Thai Medical Council (QSNICH)	2002
Diploma	Tropical Medicine and Hygiene	Mahidol university	2011
M.D.	-	Mahidol university	1996

Affiliation: Department of Tropical Pediatric, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties:

Pediatric infectious disease, Vaccine research

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1. Tunyong W, Hattasingh W , Mahakunkijcharoena Y, Kalambaheti T. Immunogenicity induced by the heptavalent pneumococcal conjugate vaccine among Thai children at high risk for severe pneumococcal disease. Ped Health Res 2018;3:1-5.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2.Chanthavanich P, Limkittikul K, Sirivichayakul C, Chokejindachai W, Hattasingh W , Pengsaa K, Surangsirat S, Srisuwannaporn T, Kaewma B, Yoksan S, Jun G, Zhumu B. Immunogenicity and safety of inactivated chromatographically purified Vero cell-derived Japanese encephalitis vaccine in Thai children. Hum Vaccin Immunother 2018;14(4):900-5.	12/1	2018
Journal articles	3. Hattasingh W , Pengsaa K, Thisyakorn U; 1st Workshop on National Immunization Programs and Vaccine Coverage in ASEAN Group. Report on: "The 1st Workshop on National Immunization Programs and Vaccine Coverage in ASEAN Countries, April 30,2015, Pattaya, Thailand". Vaccine. 2016 Mar 4;34(10):1233-40.	12/1	2018

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

22. Name: Assistant Professor Dr. Wirichada Pan-ngum

Education

Degree	Degree Name	Institute	Year
Ph.D.	Infectious Diseases	University of Liverpool, UK.	2007
M.Sc.	Applied Statistics	University of Oxford, UK.	1999
B.Sc.	Mathematics Operational Research, Statistics and Economics (MORSE)	University of Warwick, UK.	1998

Affiliation: Department of Tropical Hygiene, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

1. Mathematical modeling of Infectious Disease
2. Clinical data management and Statistics

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Name	Academic performance standard criteria/Weights	Years
Journal articles	1. Srichan P, Niyom SL, Pacheun O, Iamsirithawon S, Chatchen S, Jones C, White LJ, Pan-Ngum W . Addressing challenges faced by insecticide spraying for the control of dengue fever in Bangkok, Thailand: a qualitative approach. Int Health. 2018; 10(5):349-55.	12/1	2018

Publication types	Name	Academic performance standard criteria/Weights	Years
Journal articles	2. Moek F, Poe P, Charunwatthana P, Pan-Ngum W , Wattanagoon Y, Chierakul W. The reliability of the clinical examination in predicting hemodynamic status in acute febrile illness in a tropical, resource-limited setting. Trans R Soc Trop Med Hyg. 2018; 112(4): 200-5.	12/1	2018
Journal articles	3. Phakhounthong K, Chaovalit P, Jittamala P, Blacksell SD, Carter MJ, Turner P, Chheng K, Sona S, Kumar V, Day NPJ, White LJ, Pan-Ngum W . Predicting the severity of dengue fever in children on admission based on clinical features and laboratory indicators: application of classification tree analysis. BMC Pediatr. 2018; 18(1): 109.	12/1	2018
Journal articles	4. Thu SWYM, Kisanayotin B, Kaewkungwal J, Soonthornworasiri N, Pan-Ngum W . Satisfaction with Paper-Based Dental Records and Perception of Electronic Dental Records among Dental Professionals in Myanmar. Healthc Inform Res. 2017; 23(4): 304-13.	12/1	2017
Journal articles	5. Chaiteerakij R, Pan-Ngum W , Poovorawan K, Soonthornworasiri N, Treeprasertsuk S, Phaosawasdi K. Characteristics and outcomes of cholangiocarcinoma by region in Thailand: A nationwide study. World J Gastroenterol. 2017; 23(39): 7160-7.	12/1	2017

Publication types	Name	Academic performance standard criteria/Weights	Years
Journal articles	6.Charatcharoenwiththaya P, Soonthornworasiri N, Karaketklang K, Poovorawan K, Pan-Ngum W , Chotiyaputta W, et al. Factors affecting mortality and resource use for hospitalized patients with cirrhosis: A population-based study. Medicine (Baltimore). 2017; 96(32): e7782.	12/1	2017
Journal articles	7. Pan-Ngum W , Kinyanjui T, Kiti M, Taylor S, Toussaint JF, Saralamba S, et al. Predicting the relative impacts of maternal and neonatal respiratory syncytial virus (RSV) vaccine target product profiles: A consensus modelling approach. Vaccine. 2017; 35(2):403-9.	12/1	2017
Journal articles	8. Sobhonslidsuk A, Poovorawan K, Soonthornworasiri N, Pan-Ngum W , Phaosawasdi K. The incidence, presentation, outcomes, risk of mortality and economic data of drug-induced liver injury from a national database in Thailand: a population-base study. BMC Gastroenterol. 2016; 16(1): 135.	12/1	2016
Journal articles	9. Poovorawan K, Pan-Ngum W , White LJ, Soonthornworasiri N, Wilairatana P, Wasitthankasem R, et al. Estimating the Impact of Expanding Treatment Coverage and Allocation Strategies for Chronic Hepatitis C in a Direct Antiviral Agent Era. PLoS One. 2016; 11(9): e0163095.	12/1	2016

Publication types	Name	Academic performance standard criteria/Weights	Years
Journal articles	10.Poovorawan K, Pan-Ngum W , Soonthornworasiri N, Kulrat C, Kittitrakul C, Wilairatana P, et al. Burden of Liver Abscess and Survival Risk Score in Thailand: A Population-Based Study. Am J Trop Med Hyg. 2016; 95(3): 683-8.	12/1	2018

Current Teaching Load

TMID	513	Biostatistics	2 (2-0-4)
TMID	544	Research Methodology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	515	Epidemiology and Biostatistics in School Health	2 (2-0-4)
TMID	544	Research Methodology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

23. Name: Assistant Professor Dr. Yanin Limpanont

Education

Degree	Degree Name	Institute	Year
D.Sc.	Marine Life Science	Jeju National University South Korea	2010
M.S.	Aquatic Animal Medicine	Chulalongkorn University	2004
D.V.M.		Chulalongkorn University	2001

Affiliation: Department of Social and Environmental Medicine, Faculty of Tropical medicine,
Mahidol University

Interesting Research Topics or Specialties

Medical Malacology, Environmental Health Impact Assessment

Publications that are not part of any degree study and are complied with the criteria for
academic position appointment within 5 years

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1. Kang HS, Itoh N, Limpanont Y , Lee HM, Whang I, Choi KS. A Novel Paramyxean Parasite, <i>Marteilia tapetis</i> sp. nov. (Cercospora) Infecting the Digestive Gland of Manila clam <i>Ruditapes philippinarum</i> from the Southeast Coast of Korea. J Invertebr Pathol. 2019 Mar 21. pii: S0022-2011(18)30201-5. doi:10.1016/j.jip.2019.03.006.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2. Deng MH, Zhong LY, Kamolnetr O, Limpanont Y , Lv ZY. Detection of helminths by loop-mediated isothermal amplification assay: a review of updated technology and future outlook. Infect Dis Poverty. 2019 Mar 25;8(1):20. doi: 10.1186/s40249-019-0530-z.	12/1	2019
Journal articles	3. Zhu GL, Tang YY, Limpanont Y , Wu ZD, Li J, Lv ZY. Zoonotic parasites carried by invasive alien species in China. Infect Dis Poverty. 2019 Jan 9;8(1):2. doi: 10.1186/s40249-018-0512-6	12/1	2019
Journal articles	4. Phuphisut O, Ajawatanawong P, Limpanont Y , Reamtong O, Nuamtanong S, Ampawong S, Chaimon S, Dekumyoy P, Watthanakulpanich D, Swierczewski BE, Adisakwattana P. Transcriptomic analysis of male and female Schistosoma mekongi adult worms. Parasit Vectors. 2018 Sep 10;11(1):504. doi: 10.1186/s13071-018-3086-z.	12/1	2018
Journal articles	5. Thiangtrongjit T, Adisakwattana P, Limpanont Y , Dekumyoy P, Nuamtanong S, Chusongsang P, et al. Proteomic and immunomic analysis of Schistosoma mekongi egg proteins. Exp Parasitol. 2018;191:88-96.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	6. Ng TH, Limpanont Y , Chusongsang Y, Chusongsang P, Panha S. Correcting misidentifications and first confirmation of the globally-invasive <i>Physa acuta</i> Draparnaud, 1805 (Gastropoda: Physidae) in Thailand and Laos. <i>BiolInvasions Rec.</i> 2018; doi: 10.3391/bir.2018.7.1.03.	12/1	2018
Journal articles	7. Lu XT, Gu QY, Limpanont Y , Song LG, Wu ZD, Okanurak K, et al. Snail-borne parasitic diseases: an update on global epidemiological distribution, transmission interruption and control methods. <i>Infect Dis Poverty.</i> 2018; 7: 28.	12/1	2018
Journal articles	8. Rakhmani AN, Limpanont Y , Kaewkungwal J, Okanurak K. Factors associated with dengue prevention behaviour in Lowokwaru, Malang, Indonesia: a cross-sectional study. <i>BMC Public Health.</i> 2018; 18(1): 619.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	5. Mengying Z, Yiyue X, Tong P, Yue H, Limpanont Y , Ping H, et al. Apoptosis and necroptosis of mouse hippocampal and parenchymal astrocytes, microglia and neurons caused by <i>Angiostrongylus cantonensis</i> infection. <i>Parasit Vectors</i> . 2017; 10(1): 611.	12/1	2017
Journal articles	6. Sudsandee S, Tantrakarnapa K, Tharnpoophasiam P, Limpanont Y , Mingkhwan R, Worakhunpiset S. Evaluating health risks posed by heavy metals to humans consuming blood cockles (<i>Anadara granosa</i>) from the Upper Gulf of Thailand. <i>Environ Sci Pollut Res Int</i> . 2017: 1-11.	12/1	2017
Journal articles	7. Rakhmani AN, Okanurak K, Kaewkungwal J, Limpanont Y , Iamsirithaworn S. Knowledge, perception, and dengue prevention behavior in lowokwaru sub district, urban area in Malang, Indonesia. <i>J Adv Med Med Res</i> . 2017: 3(1): 17-26	12/1	2017

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	8. Pakchotanon P, Molee P, Nuamtanong S, Limpanont Y , Chusongsang P, Limsomboon J, et al. Molecular characterization of serine protease inhibitor isoform 3, SmSPI, from <i>Schistosoma mansoni</i> . Parasitol Res. 2016; 115(8): 2981-94.	12/1	2017
Journal articles	9. Wang T, Zhao M, Rotgans BA, Strong A, Liang D, Ni G, Limpanont Y , et al. Cummins SF: Proteomic Analysis of the <i>Schistosoma mansoni</i> Miracidium. PLoS One. 2016, 11(1): e0147247.	12/1	2016
Journal articles	10. Sangfuang M, Chusongsang Y, Limpanont Y , Vanichviriyakit R, Chotwiwatthanakun C, Sobhon P, et al. <i>Schistosoma mekongi</i> cathepsin B and its use in the development of an immunodiagnosis. Acta Trop. 2016; 155: 11-9.	12/1	2016

Current Teaching Load

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	524	Fundamentals of Environmental Health and Toxicology	2 (2-0-4)
TMSH	528	Environmental Management	2 (2-0-4)
TMSE	529	Principle of Environmental Biotechnology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	524	Fundamentals of Environmental Health and Toxicology	2 (2-0-4)
TMSH	528	Environmental Management	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

24. Name: Lecturer Dr. Amornrat Aroonnuat

Education

Degree	Degree Name	Institute	Year
Ph.D.	Biotechnology	Mahidol University	2006
B.Sc.	Biotechnology	Mahidol University	2000

Affiliation: Department of Tropical Nutrition and Food Science, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

Food Safety and Microbiology

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1: Paratthakonkun C, Kaewprasert S, Arthan D, Soonthornworasiri N, Tungtrongchitr R, Prangthip P, Wongsutthilerd A, Pooudoung S, Chantaranipapong Y, Nakosiri W, Aroonnuat A , Chupeerach C, Chanchai S, Nana A. Associations among serum folate, waist-to-hip ratio, lipid profile, and eating habits with homocysteine in an elderly Thai population. Int J Vitam Nutr Res. 2019 Apr 15:1-9.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2: Dowdell P, Chankhamhaengdech S, Panbangred W, Janvilisri T, Aroonnual A . Probiotic Activity of Enterococcus faecium and Lactococcus lactis Isolated from Thai Fermented Sausages and Their Protective Effect Against <i>Clostridium difficile</i> . Probiotics Antimicrob Proteins. 2019 Mar 19. doi:10.1007/s12602-019-09536-7.	12/1	2019
Journal articles	3. Aroonnual A , Janvilisri T, Ounjai P, Chankhamhaengdech S. Essays Biochem. 2017; 61(1): 91-101.	12/1	2017
Journal articles	4. Singh AK, Leprun L, Drolia R, Bai X, Kim H, Aroonnual A , et al. Virulence Gene-Associated Mutant Bacterial Colonies Generate Differentiating Two-Dimensional Laser Scatter Fingerprints. Appl Environ Microbiol. 2016; 82(11): 3256-68.	12/1	2017

Current Teaching Load

TMSH	505	School Health Management	2 (0-4-2)
TMSH	506	Nutrition Principles for School Children	4 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	505	School Health Management	2 (0-4-2)
TMSH	513	Nutrition Principles for School Children	5 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

25. Name: Lecturer Dr. Athit Phetrak

Education

Degree	Degree Name	Institute	Year
Ph.D.	Environmental Engineering	The University of Tokyo, Japan	2012
M.Sc.	Environmental Technology and Management	Asian Institute of Technology	2009
B.Sc.	Public Health	Mahidol University	2006

Affiliation: Department of Social and Environmental Medicine, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

Water and health, Drinking water, disinfection by-product, Chemical contaminant in water

Publications that are not part of any degree of study and are complied with the certificate for academic position appointment within 5 years.

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1. Kitkaew D, Phetrak A , Ampawong S, Phihusut D, Mingkhwan R, Okanurak K, et al. Fast and Efficient Removal of Hexavalent Chromium from Water by Iron Oxide Particles. Environ. Nat. Resour. J. 2018; 16 (1): 91-100.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2. Yimyam K, Wongrueng A, Rakruam P, Nitayavardhana S, Phetrak A , Theepharaksapan S, et al. Reduction of DBP Precursors and their THMFPS in Leachate Contaminated Groundwater by PAC Adsorption. Engineering Journal. 2017; 21(4), 11-23.	12/1	2017
Journal articles	3. Phetrak A , Lohwacharin J, Takizawa S. Analysis of trihalomethane precursor removal from sub-tropical reservoir waters by a magnetic ion exchange resin using a combined method of chloride concentration variation and surrogate organic molecules. Sci Total Environ. 2016; 539: 165-74.	12/1	2016

Current Teaching Load

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

26. Name: Lecturer Dr. Pannamas Maneekan

Education

Degree	Degree Name	Institute	Year
Ph.D.	Tropical Medicine	Mahidol University	2014
M.Sc.	Community Medicine	Chulalongkorn University	1997
B.N.S.	Nursing Science	Chonburi Nursing College	1991

Affiliation: Department of Tropical Hygiene, Faculty of Tropical Medicine,
Mahidol University

Interesting Research Topics or Specialties

Community Medicine, Public Health, School Health

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1. Income N, Kosoltanapiwat N, Taksinoros S, Leaungwutiwong P, Maneekan P, Chavez IF. Molecular Identification of Enteroviruses from Cattle and Goat Feces and Environment in Thailand. Appl Environ Microbiol. 2019 Feb 20;85:e02420-18.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2.Suwanmanee S, Surasombatpattana P, Soonthornworasiri N, Hamel R, Maneeekan P , Missé D, Luplertlop N. Monitoring arbovirus in Thailand: Surveillance of dengue, chikungunya and zika virus, with a focus on coinfections. Acta Trop. 2018;188:244-250.	12/1	2018
Journal articles	3. Tuekprakhon A, Nakayama EE, Bartholomeeusen K, Puiprom O, Sasaki T, Huits R, Luplertlop N, Kosoltanapiwat N, Maneeekan P , et al. Variation at position 350 in the Chikungunya virus 6K-E1 protein determines the sensitivity of detection in a rapid E1-antigen test. Sci Rep. 2018; 8(1): 1094.	12/1	2018
Journal articles	4. Norbu W, Wangdi U, Dorji D, Arthan D, Soonthornworasiri N, Maneeekan P , et al. Obesity prevalence and contributing factors among adolescents in secondary schools in Pemagatshel district, Bhutan. Int J Adolesc Med Health. 2017; 18;31(1). pii: /j/ijamh.	12/1	2017

Current Teaching Load

T MID	513	Biostatistics	2 (2-0-4)
T MSH	504	School Health Development	2 (1-2-3)
T MSH	505	School Health Management	2 (0-4-2)
T MSH	508	Health Behaviors of School Children	2 (2-0-4)
T MSH	510	School Health Seminar	2 (2-0-4)
T MSH	511	Special Topic in School Health Based Research	2 (2-0-4)
T MSH	697	Thematic paper	6 (0-18-0)
T MSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

T MSH	504	School Health Development	2 (1-2-3)
T MSH	505	School Health Management	2 (0-4-2)
T MSH	513	Nutrition Principles for School Children	2 (2-0-4)
T MSH	517	Health Behaviors of School Children	2 (2-0-4)
T MSH	514	School Health Seminars	2 (2-0-4)
T MSH	511	Special Topic in School Health Based Research	2 (2-0-4)
T MSH	518	Instructional Media Design for School Health Promotion	2 (1-2-3)
T MSH	697	Thematic paper	6 (0-18-0)
T MSH	698	Thesis	12 (0-36-0)

27. Name: Lecturer Dr. Pimphen Charoen

Education

Degree	Degree Name	Institute	Year
Ph.D.	Statistical Genetics	Imperial College London, UK	2014
M. Phil	Statistical Genetics	University of Cambridge, UK	2008
M.Sc.	Applied Mathematics	University of New South Wales, Australia	2005
B.Sc.	Mathematics	Mahidol University	2002

Affiliation: Department of Tropical Hygiene, Faculty of Tropical Medicine,
Mahidol University

Interesting Research Topics or Specialties

Statistical Genetics, Genome-wide association Studies, Causal Inference using multiple Genetic variants, Cardiovascular Disease Traits

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1. Macare C, Ducci F, Zhang Y, Ruggeri B, Jia T, Kaakinen M, Kalsi G, Charoen P , et al. A neurobiological pathway to smoking in adolescence: TTC12-ANKK1-DRD2 variants and reward response. Eur Neuropsychopharmacol. 2018; 28(10): 1103-14.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2. Darlow JM, Darlay R, Dobson MG, Stewart A, Charoen P , Southgate J, et al. Publisher Correction: Genome-wide linkage and association study implicates the 10q26 region as a major genetic contributor to primary nonsyndromic vesicoureteric reflux. Sci Rep. 2018; 8(1): 459.	12/1	2018
Journal articles	3. Charoen P , Nitsch D, Engmann J, Shah T, White J, Zabaneh D, et al. Mendelian Randomisation study of the influence of eGFR on coronary heart disease. Sci Rep. 2016; 6: 28514.	12/1	2016
Journal articles	4. McLachlan S, Giambartolomei C, White J, Charoen P , Wong A, Finan C, et al. Replication and Characterization of Association between ABO SNPs and Red Blood Cell Traits by Meta-Analysis in Europeans. PLoS One. 2016; 11(6): e0156914	12/1	2016

Current Teaching Load

TMID	513	Biostatistics	2 (2-0-4)
TMID	544	Research Methodology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	515	Epidemiology and Biostatistics in School Health	2 (2-0-4)
TMID	544	Research Methodology	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

28. Name: Lecturer Dr. Suparat Phuanukoonnon

Education

Degree	Degree Name	Institute	Year
Ph.D.	Tropical Health	University of Queensland, Australia	2003
M.H.S	Environmental health	Queensland University of Technology, Australia	1998
B.N.S.	Nursing	Boromarajonani College of Nursing Lampang	1990

Affiliation: Department of Social and Environmental Medicine, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

Health promotion, Behaviour science, Public health, Community intervention impact assessment

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1: Saita S, Silawan T, Parker DM, Sriwichai P, Phuanukoonnon S , Sudathip P, Maude RJ, White LJ, Pan-Ngum W. Spatial Heterogeneity and Temporal Trends in Malaria on the Thai-Myanmar Border (2012-2017): A Retrospective Observational Study. Trop Med Infect Dis. 2019; 12; E62.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2: Gouda HN, Hazard RH, Maraga S, Flaxman AD, Stewart A, Joseph JC, Rarau P, Wangnapi R, Poka H, Serina P, Phuanukoonnon S , Pham BN, Vano M, Lupiwa S, Sie A, Kave H, Lehmann D, Siba P, Lopez AD, Riley ID. The epidemiological transition in Papua New Guinea: new evidence from verbal autopsy studies. Int J Epidemiol. 2019 Mar 26. pi: dyz018.	12/1	2019
Journal articles	3: Saita S, Pan-Ngum W, Phuanukoonnon S , Sriwichai P, Silawan T, White LJ, Parker DM. Human population movement and behavioural patterns in malaria hotspots on the Thai-Myanmar border: implications for malaria elimination. Malar J. 2019 Mar 8; 18: 64.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	4.Rarau P, Vengiau G, Gouda H, Phuanukoonnon S , Kevau IH, Bullen C, et al. The Prevalence of Non-Communicable Disease risk factors in three sites across Papua New Guinea: A Cross-sectional study. BMJ Global Health. 2017; 2(2): e000221	12/1	2017
Journal articles	5.Emori R, Vallely AJ, Gouda H, Siba P, Phuanukoonnon S , Mola G, et al. Women's recall of provision of antenatal care in Papua New Guinea: Findings of a maternal and infant health survey conducted in three provinces. P N G Med J. 2017; 60(1-2): 15-26.	12/1	2017
Journal articles	6. Emori R, Vallely AJ, Gouda H, Siba P, Phuanukoonnon S , Mola G, et al. Supervised and unsupervised birth and early newborn care practices in Papua New Guinea: Findings of a maternal and infant health survey conducted in three provinces. P N G Med J. 2017; 60(1-2): 27-40	12/1	2017
Journal articles	7. Morita A, Natsuhara K, Vengiau G, Chia-Jung Chen C, Odani S, Inaoka T, Tadokoro K, Suda K, Furusawa T, Siba P, Phuanukoonnon S , et al. Reduced morning cortisol concentration in saliva was associated with obesity: Evidence from community-dwelling adults in papua new guinea. Am J Hum Biol. 2016; 28(4):587-90.	12/1	2017

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	5. Vallely LM, Toliman P, Ryan C, Rai G, Wapling J, Tomado C, Huliafi S, Munnall G, Rarau P, Phuanukoonnon S , et al. Prevalence and risk factors of <i>Chlamydia trachomatis</i> , <i>Neisseria gonorrhoeae</i> , <i>Trichomonas vaginalis</i> and other sexually transmissible infections among women attending antenatal clinics in three provinces in Papua New Guinea: a cross-sectional survey. Sex Health. 2016; 13(5): 420-7.	12/1	2017
Journal articles	8. Aho C, Michael A, Yoannes M, Greenhill AR, Jacoby P, Reeder, J, Pomat W, Saleu G, Namuigi P, Phuanukoonnon S , et al. Limited impact of neonatal or early infant schedules of 7-valent pneumococcal conjugate vaccination on nasopharyngeal carriage of <i>Streptococcus pneumoniae</i> in Papua New Guinean children: a randomized controlled trial. Vaccine Rep. 2016; 6: 36-43.	12/1	2017
Journal articles	9. Longley RJ, Sriporote P, Chobson P, Saeseu T, Sukasem C, Phuanukoonnon S , et al. High Efficacy of Primaquine Treatment for <i>Plasmodium vivax</i> in Western Thailand. Am J Trop Med Hyg. 2016; 95(5): 1086-9.	12/1	2017

Current Teaching Load

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	503	School Environment Management	2 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

29. Name: Lecturer Dr. Sarunya Kaewprasert

Education

Degree	Degree Name	Institute	Year
Ph.D.	Nutritional Biochemistry	Hokkaido University, Japan	2002
M.Sc.	Nutritional Biochemistry	Hokkaido University, Japan	1999
B.Sc	Biotechnology	Mahidol University	1997

Affiliation: Department of Tropical Nutrition & Food Science, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

Holistic Health, Community Nutrition, Biochemical Nutrition, Food Science and Biotechnology

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1.Paratthakonkun C, Kaewprasert S , Arthan D, Soonthornworasiri N, Tungtrongchitr R, Prangthip P, Wongsutthilerd A, Pooudoung S, Chantaranipapong Y, Nakosiri W, Aroonnuat A, Chupeerach C, Chanchai S, Nana A. Associations among serum folate, waist-to-hip ratio, lipid profile, and eating habits with homocysteine in an elderly Thai population. Int J Vitam Nutr Res. 2019;15:1-9.	12/1	2019

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2. Suriyaprom K, Kaewprasert S , Putpadungwipon P, Namjuntra P, Klongthalay S. Association of antioxidant status and inflammatory markers with metabolic syndrome in Thais. J Health Popul Nutr. 2019; 3;38(1):1.	12/1	2019
Journal articles	3. Khuntamoon T, Thepouyporn A, Kaewprasert S , Prangthip P, Pooudoung S, Chaisri U, Maneesai P, Kwanbunjan K. Thai generic-brand dry canine foods: mutagenicity and the effects of feeding in vivo and in vitro. BMC Vet Res. 2016; 20; 12:17.	12/1	2019

Current Teaching Load

TMSH	505	School Health Management	2 (0-4-2)
TMSH	506	Nutrition Principles for School Children	6 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	505	School Health Management	2 (0-4-2)
TMSH	513	Nutrition Principles for School Children	7 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Full time instructors

The Mahidol University Council has approved the adjusted program in its 552nd meeting on January 15 , 2020

1. Assistant Professor Dr. Watcharee Arunsodsai

Degree	Degree Name	Institute	Year
Ph.D.	Infectious and Tropical Diseases	University of London, UK	2005
Diploma of Infectious Diseases		International Medical Center of Japan, Japan	1998
Dip. Thai Board of Tropical Medicine and Hygiene		Mahidol University	1996
Dip. Thai Board of Pediatrics		Thai Medical Council	1993
M.D.		Mahidol University	1987

Affiliation: Department of Pediatrics, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

Malaria in children, Dengue infection, Diarrhea Vaccines, Parasitic infections, Virus

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1. Chanthavanich P, Limkittikul K, Sirivichayakul C, Chokejindachai W, et al. Immunogenicity and safety of inactivated chromatographically purified Vero cell-derived Japanese encephalitis vaccine in Thai children. Hum Vaccin Immunother 2018; 14(4): 900-905.	12/1	2018

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	2: Tareen Z, Jirapradittha J, Sirivichayakul C, Chokejindachai W , Rafiqi N. Factors Associated with Mortality Outcomes in Neonatal Septicemia in Srinagarind Hospital, Thailand. Neonat Pediatr Med 2017; 3: 131.	12/1	2017

Current Teaching Load

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)
TMSH	502	Diseases in School Children	3 (2-2-5)

Assigned Teaching Load for the Proposed Program

TMSH	502	Diseases in School Children	3 (2-2-5)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

2. Name: Lecturer Dr. Pornrutsami Jintaridh

Education

Degree	Degree Name	Institute	Year
Ph.D.	Biochemistry	Mahidol University	2005
M.Sc.	Nutrition	Mahidol University	1995
B.Sc.	Nursing	Chulalongkorn University	1986

Affiliation: Department of Tropical Nutrition & Food Science, Faculty of Tropical Medicine, Mahidol University

Interesting Research Topics or Specialties

Epigenetics, Nutrition and Elderly

Publications that are not parts of any degree study and are complied with the criteria for academic position appointment within 5 Years

Publication types	Publication Names	Academic performance standard criteria /Weights	Years
Journal articles	1: Patchsung M, Settayanon S, Pongpanich M, Jintarith P , Mutirangura D, Mutirangura A. Alu siRNA to increase Alu element methylation and prevent DNA damage. Future Medicine. 2018; 10:175-185.	12/1	2018

Current Teaching Load

TMSH	505	School Health Management	2 (0-4-2)
TMSH	506	Nutrition Principles for School Children	8 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Assigned Teaching Load for the Proposed Program

TMSH	505	School Health Management	2 (0-4-2)
TMSH	513	Nutrition Principles for School Children	9 (2-0-4)
TMSH	697	Thematic paper	6 (0-18-0)
TMSH	698	Thesis	12 (0-36-0)

Appendix C

Curriculum Mapping

Appendix C

Curriculum Mapping



Major responsibility



Minor responsibility

Subjects		Morality and Ethics		Knowledge development	Intellectual developments					Interpersonal Relationship and Responsibility			Mathematical	Analytical Thinking communication skills, and information technology skills
		1.1	1.2	2.1	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	5.1	5.2
1. Required Courses														
TMSH 502	Diseases in School Children			●	○	●	●	○	○					○
TMSH 503	School Environment Management	○	○	●	●	●			●	●	○	○		○
TMSH 504	School Health Development	●	●	●	●	●	●	○	●	●	●			●
TMSH 505	School Health Management	●	●	●	●	●	●	●	●	●	●	●	●	●
TMSH 512	Health Issues in Schools	○	○	●	●	●	○	○	○	○	●	○		
TMSH 513	Nutrition Principles for School Children	○		●	●	●	○	○	○	○	○	●	●	●
TMSH 514	School Health Seminars	●	●	●	●	●	●	○	○	○	○	○	●	●
TMSH 515	Epidemiology and Biostatistics in School Health	○	○	●	●	●	●	●	○	○	●	○	●	●
TMID 544	Research Methodology	●	●	●	●	●	●			●	●		●	●
2. Elective courses														
TMSH 511	Special Topics in School-Health Based Research	●	●	●	●	●	●	○	○				●	●
TMSH 516	Food for School Children	○		●	●	●	○	○	○	○	○	○	○	●

Subjects		Morality and Ethics		Knowledge development	Intellectual developments					Interpersonal Relationship and Responsibility			Mathematical	Analytical Thinking communication skills, and information technology skills
		1.1	1.2	2.1	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	5.1	5.2
TMSH 517	Health Behaviors of School Children	○	○	●	●	●	●	●	●	●	●	○	○	●
TMSH 518	Instructional Media Design for School Health Promotions	○	○	●	●	●	●	●	●	○	●	●		●
TMSE 524	Principle of Environmental Health and Toxicology			●	●	●	○	●	●	●			●	●
TMSE 528	Environmental Management	○	○	●	●	○	○	●	●	●			●	●
TMHG 549	Application of Geographical Information System (GIS) in Epidemiology	●	●	●	●			○	○	●	●		●	●
TMCD 519	AIDS	●	○	●	●	●	○						●	○
TMNU 506	Nutrition	○		●	●	●	○			○	○	●	●	●
3. Thesis/Thematic paper														
TMSH 697	Thematic Paper	●	●	●	●	●	●	●	●	●	●	●	●	●
TMSH 698	Thesis	●	●	●	●	●	●	●	●	●	●	●	●	●

Table of Relationship between Learning Outcomes of the Program and Core Value of Mahidol University

Learning Outcomes	Core value of Mahidol University
1. Morality and Ethics: Students have to have moral and ethics, be able to live with others, and focus on benefits of others.	
1.1 Demonstrate good moral	Integrity, Altruism
1.2 Demonstrate the school health situation and solve health problems in schools with ethical consideration	Integrity, Altruism, Determination, Leadership
2. Knowledge development: Students will be knowledgeable	
2.1 Describe school health problems using theory and practice for academic and professional development	Mastery, Altruism, Determination, Originality
3. Intellectual development: Students become self-directed and autonomous thinker	
3.1 Apply school health knowledge and create concept idea for school health project	Mastery, Altruism, Determination, Originality
3.2 Identify the current challenges affecting school health	Mastery, Integrity, Determination, Originality, Leadership
3.3 Demonstrate sharing knowledge, providing health counseling for the benefit of school health development projects	Altruism, Harmony, Integrity, Leadership
3.4 Design creative activities for health in school promotion effectively	Mastery, Altruism, Harmony, Integrity, Determination, Originality, Leadership
3.5 Design plans and implement the school health development projects themselves	Mastery, Altruism, Determination, Originality
4. Interpersonal relationship and responsibility: Students must have good behaviors and interpersonal relationship. They should be responsible for their work, self-respected, and respect to others	
4.1 Work effectively with others and have a good relationship	Mastery, Harmony, Integrity, Determination, Leadership
4.2 Handle their assignments effectively and with discipline, responsibility	Mastery, Integrity, Determination, Leadership
4.3 Manage teamwork for school health actioning	Mastery, Altruism, Harmony, Integrity, Determination, Originality, Leadership
5. Mathematical analytical thinking, communication skills, and information technology skills	
5.1 Apply statistical tools to analyze school health data	Mastery, Altruism, Determination
5.2 Apply information technology to analyze and present data for the research appropriately.	Mastery, Harmony, Integrity, Determination, Originality, Leadership

Appendix D

Program Learning Outcomes

Appendix D

Program Learning Outcomes

Table 1: Comparison between before and after revised objective of the Program

Objectives of the Program 2014	Revised Objectives of the Program 2020
1. Graduates have ethics and responsibility in analysis and solving school health problems.	Morality and Ethics: 1. Demonstrate integrity, good moral and self-sacrifice for the welfare of the school community.
2. Graduates have gain various knowledge on health science, nutrition and environment and are able to apply these knowledge to set up research plans and new knowledge.	Knowledge development: 2. Demonstrate competency in current contents of school health knowledge
3. Graduates are able to define school health problems and set up plans for school health improvement.	Intellectual development: 3. Apply knowledge gained and skills in recognizing problems, and plan, implement, manage and evaluate the impact of school health development projects
4. Graduates have good interpersonal relationship and are able to make a teamwork	International Relationship and Responsibility: 4. Work cooperatively with leadership and high responsibility for assigned work
5. Graduates are able to analyses statistical data and use IT skill to search for advanced knowledge and present their information appropriately.	Mathematical Analytical Thinking, Communication skills and Information: 5. Apply statistic analytical thinking and information technology to search for work, communication and presentation effectively.

Table 2: Relationship between objectives of the Program and expected learning outcome

Objectives of the Program	Program Learning Outcomes*				
	1	2	3	4	5
1. Demonstrate integrity, good moral and self-sacrifice for the welfare of the school community.	✓		✓	✓	✓
2. Demonstrate competency in current contents of school health knowledge		✓	✓		✓
3. Apply knowledge gained and skills in recognizing problems, and plan, implement, manage and evaluate the impact of school health development projects		✓	✓	✓	✓
4. Work cooperatively with leadership and high responsibility for assigned	✓	✓	✓	✓	
5. Apply statistic analytical thinking and information technology to search for work, communication and presentation effectively	✓	✓	✓		✓

PLO1 Demonstrate moral and ethical manners in school-health-based research.

PLO2 Describe comprehensive knowledge of school health.

PLO3 Apply knowledge gained and skills in health promotion, health prevention, health education, and health management, to solve health problems in schools and communities.

PLO4 Facilitate either as leaders or followers to complete the collaborative works

PLO5 Apply appropriate scientific methods including statistical methods and information technology in school health.

Table 3: Standard domains of learning outcome and Program Learning Outcomes

Domains	Standard Learning Outcomes (TQF)	Program Learning Outcomes				
		PLO1	PLO2	PLO3	PLO4	PLO5
Morality and Ethics	1.1 Demonstrate good moral	✓				✓
	1.2 Demonstrate the school health situation and solve health problems in schools with ethical consideration	✓		✓		✓
Knowledge	2.1 Describe school health problems using theory and practice for academic and professional development		✓	✓	✓	
Intellectual Development	3.1 Apply school health knowledge and create concept idea for school health project			✓		✓
	3.2 Identify the current challenges affecting school health			✓	✓	✓
	3.3 Demonstrate sharing knowledge, providing health counseling for the benefit of school health development projects			✓	✓	✓
	3.4 Design creative activities for health promotion in school effectively		✓	✓		
	3.5 Design plans and implement the school health development projects themselves	✓		✓	✓	✓
Interpersonal Relationship and Responsibility	4.1 Work effectively with others and have a good relationship			✓	✓	
	4.2 Handle their assignments effectively and with discipline, responsibility			✓	✓	
	4.3 Manage teamwork for school health actioning			✓	✓	
Math, Communication, IT Skills	5.1 Apply statistical tools to analyze school health data	✓		✓		✓
	5.2 Apply information technology to analyze and present data for the research appropriately.	✓		✓		✓

Table 4: Learning and Assessment Strategies for Program Learning Outcomes Evaluation

PLO1: Demonstrate moral and ethical manners in school-health-based research.	<ul style="list-style-type: none"> - Practice - Problem solving, - Field of study - Proposal, Thesis/Thematic paper writing 	<ul style="list-style-type: none"> - Observation - Performance assessment using rubric scoring - Ethical approval - Defense of proposal & thesis/thematic paper
PLO2: Describe comprehensive knowledge of school health.	<ul style="list-style-type: none"> - Lecture, - Problem solving, - Work Assignment, - Case study and discussion via school visit -Field of study 	<ul style="list-style-type: none"> - Examination (Written/MCQ) - Comprehensive Examination - Rubric scoring for problem solving, work assessment and case based learning
PLO3: Apply knowledge gained and skills in health promotion, health prevention, health education, and health management, to solve health problems in schools and communities.	<ul style="list-style-type: none"> - Field of study - Work Assignment, - Q&A, Discussion, - Research conduct including paper presentation/writing thesis/thematic 	<ul style="list-style-type: none"> - Rubric scoring assessment for problem, solving during field practicum and research conduct - Defense of thematic paper /thesis

Expected Outcome	Teaching Strategies	Evaluation Strategies
PLO4: Facilitate either as leaders or followers to complete the collaborative works	<ul style="list-style-type: none"> - School visit - Field of study - Research conduct including paper presentation/writing thesis/thematic 	Observation and rubric scoring assessment for quality and completeness of assignment in school visit/field practicum and research conduct
PLO5: Apply appropriate scientific methods including statistical methods and information technology in school health.	<ul style="list-style-type: none"> -Presentation of proposal, and defense of Thesis/Thematic paper - Field of study 	Observation & Rubric scoring assessment for presentation and informatics

Table 5: Relationship between Courses of the Program and Program Learning Outcomes

Code	Name	Credit	PLOs				
			1	2	3	4	5
1. Required Courses							
TMSH 502	Diseases in School Children	3 (2-2-5)		I	I	I	
TMSH 503	School Environment Management	2 (2-0-4)	I	I	R	R	I
TMSH 504	School Health Development	2 (1-2-3)	I	R	R	R	I
TMSH 505	School Health Management	2 (2-0-4)	I	M	P	R	P
TMSH 512	Health Issues in Schools	3 (3-0-6)	I	R	R	I	I
TMSH 513	Nutrition Principles for School Children	2 (2-0-4)		R	R	R	P
TMSH 514	School Health Seminars	2 (2-0-4)	P	P	P		P
TMSH 515	Epidemiology and Biostatistics in School Health	2 (2-0-4)	I	R	P	R	P
TMID 544	Research Methodology	2 (2-0-4)	P	R	P	P	P
2. Elective courses							
TMSH 511	Special Topics in School-Health Based Research	2 (2-0-4)	P	R	P	R	P
TMSH 516	Food for School Children	2 (2-0-4)		R	R	R	
TMSH 517	Health Behaviors of School Children	2 (2-0-4)	R	R	P	R	I
TMSH 518	Instructional Media Design for School Health Promotions	2 (1-2-3)	R	P	P	P	R
TMSE 524	Principle of Environmental Health and Toxicology	2 (2-0-4)	I	R	R	R	I
TMSE 528	Environmental Management	2 (2-0-4)	I	R	P	R	I
TMHG 549	Application of Geographical Information System (GIS) in Epidemiology	2 (1-2-3)	I	R	R	R	I
TMCD 519	AIDS	2 (2-0-4)	I	I	I	I	
TMNU 506	Nutrition	2 (2-0-4)	I	R	R	R	P

Code	Name	Credit	PLOs				
			1	2	3	4	5
3. Thematic paper							
TMSH697	Thematic Paper	6 (0-18-0)	M	M	M	M	M
4. Thesis							
TMSH698	Thesis	12 (0-36-0)	M	M	M	M	M

I = ELO is introduced & assessed

R = ELO is reinforced & assessed

P = ELO is practiced & assessed

M = Level of Mastery is assessed

Table 6: The expectation of learning outcomes at the end of the academic year.

Plan A2

Year of study	Knowledge, skills, and any other expected learning outcomes
1 st	<ul style="list-style-type: none"> - Demonstrate discipline, responsibility and good moral for analyzing the school health situation and solving health problems in schools - Describe comprehensive knowledge of school health and health sciences in schools - Apply knowledge gained and skills in health promotion, health prevention, health education, and health management, to solve health problems in schools and communities - Work effectively with others and have a good relationship
2 nd	<ul style="list-style-type: none"> - Apply statistical tools to analyze school health data - Apply information technology to analyze and present data for the research appropriately - Work effectively with others and have a good relationship - Conduct school health research using appropriate scientific methods, statistic programs, and information technology

Plan B

Year of study	Knowledge, skills, and any other expected learning outcomes
1 st	<ul style="list-style-type: none"> - Demonstrate discipline, responsibility and good moral for analyzing the school health situation and solving health problems in schools - Describe comprehensive knowledge of school health and health sciences in schools - Apply knowledge gained and skills in health promotion, health prevention, health education, and health management, to solve health problems in schools and communities. - Work effectively with others and have a good relationship. - Apply statistical tools to analyze school health data - Apply information technology to analyze and present data for the research appropriately - Conduct school health research using appropriate scientific methods, statistic programs, and information technology

Appendix E

The Revised Curriculum

Appendix E
The Revision of Master of Science Program
in School Health Volume B.E. 2557
Faculty of Tropical Medicine and
Faculty of Graduate Studies, Mahidol University

1. The Curriculum was approved by the Office of the Higher Education Commission on
2. The Mahidol University Council has approved this revised curriculum in the 552 meeting on January 15,2020
3. The revised curriculum will be effective with student class 2020 from the first semester of the Academic Year 2020 onwards.
4. **Rationale of revision**
 - 4.1 The curriculum is revised to be in accordance with Thai Qualification Framework for Higher Education B.E. 2552
 - 4.2 The curriculum is revised to update the structure of the curriculum to follow outcome-based education principles.
 - 4.3 The curriculum is revised to restructure the courses and teaching method according to change in technology, needs and expectations of stakeholders.
 - 4.4 The curriculum is revised to update names of faculties in charge of the program, full-time and part-time instructors of the program.
5. **The details of the revision**
 - 5.1 Re-define the program objectives.
 - 5.2 Restructure of study plan
 - 5.3 Update names of faculties in charge of the program and full-time instructor of the program as the followings:
 - 5.3.1 Update list of faculties in charge of the program

Current	Revised
Associate Professor Dr. Suwalee Worakhunpiset	Associate Professor Dr. Suwalee Worakhunpiset
Assistant Professor Dr. Dumrongkiet Arthan	Assistant Professor Dr. Dumrongkiet Arthan
Assistant Professor Dr.Prapin Tharnpoophasiam	---
---	Assistant Professor Dr. Supaluk Popruk

The Mahidol University Council has approved the adjusted program in its 552nd meeting on January 15 , 2020

5.3.2 Update list of full-time instructor of the program

Current	Revised
---	Professor Dr.Rungsun Tungtrongchitr
---	Associate Professor Dr. Aongart Mahittikorn
---	Associate Professor Chukiat Sirivichayakul
---	Associate Professor Dr. Direk Limmathurotsakul
---	Associate Professor Dr. Dorn Watthanakulpanich
---	Associate Professor Dr. Karunee Kwanbunjan
---	Associate Professor Dr. Kraichat Tantrakarnapa
---	Associate Professor Kriengsak Limkittikul
Associate Professor Dr. Paron Dekumyoy	Associate Professor Dr. Paron Dekumyoy
Associate Professor Dr. Suwalee Worakhunpiset	Associate Professor Dr. Suwalee Worakhunpiset
---	Associate Professor Dr. Thareerat Kalambaheti
Assistant Professor Dr.Prapin Tharnpoophasiam	
Assistant Professor Dr. Dumrongkiet Arthan	Assistant Professor Dr. Dumrongkiet Arthan
---	Assistant Professor Dr. Jittima Dhitavat
---	Assistant Professor Dr. Kobporn Boonnak
---	Assistant Professor Dr. Ngamphol Soontornworasiri
Assistant Professor Dr. Pattaneeya Prangthip	Assistant Professor Dr. Pattaneeya Prangthip
---	Assistant Professor Dr. Saranath Lawpoolsri Niyom
---	Assistant Professor Dr. Supaluk Popruk
---	Assistant Professor Dr. Supawat Chatchen
---	Assistant Professor Weerawan Hattasingh
---	Assistant Professor Dr. Wirichada Pan-ngum
---	Assistant Professor Dr. Yanin Limpanont
---	Lecturer Dr. Amornrat Aroonnual
---	Lecturer Dr. Athit Phetrak
---	Lecturer Dr. Pannamas Maneekan

The Mahidol University Council has approved the adjusted program in its 552nd meeting on January 15 , 2020

Current	Revised
---	Lecturer Dr. Pimphen Charoen
---	Lecturer Dr. Suparat Phuanukoonnon
---	Lecturer Dr. Sarunya Kaewprasert

5.3 Restructure courses in the program

The Comparison Table of Courses between the Current Program and Revising Program

Courses of Current Program			Courses of Revised Program			Remark
Required Course			Required Course			
Plan A2 : 20 Credits			Plan A2 : 20 Credits			
Plan B : 24 Credits			Plan B : 20 Credits			
TMSH 501 วขอร ๕๐๑	Health Issues in School ประเด็นสุขภาพในโรงเรียน	3 (3-0-6)	TMSH 512 วขอร ๕๑๒	Health Issues in Schools ประเด็นสุขภาพในโรงเรียน	3 (3-0-6)	revised course code and course description
TMSH 502 วขอร ๕๐๒	Diseases in School Children โรคในเด็กวัยเรียน	3 (2-2-5)	TMSH 502 วขอร ๕๐๒	Diseases in School Children โรคที่เกิดกับเด็กวัยเรียน	3 (2-2-5)	revised name of Thai course description
TMSH503 วขอร ๕๐๓	School Environment Management การจัดการสิ่งแวดล้อมโรงเรียน	2 (2-0-4)	TMSH503 วขอร ๕๐๓	School Environment Management การจัดการสิ่งแวดล้อมโรงเรียน	2 (2-0-4)	revised course description
TMSH 504 วขอร ๕๐๔	School Health Development การพัฒนานามัยโรงเรียน	2 (1-2-3)	TMSH 504 วขอร ๕๐๔	School Health Development การพัฒนานามัยโรงเรียน	2 (1-2-3)	revised course description
TMSH 505 วขอร ๕๐๕	School Health Management การจัดการอนามัยโรงเรียน	2 (0-4-2)	TMSH 505 วขอร ๕๐๕	School Health Management การจัดการอนามัยโรงเรียน	2 (0-4-2)	revised course description
TMSH 506 วขอร ๕๐๖	Nutrition Principle for School Children หลักโภชนศาสตร์สำหรับเด็ก วัยเรียน	2 (2-0-4)	TMSH 513 วขอร ๕๑๓	Nutrition Principles for School Children หลักโภชนศาสตร์สำหรับเด็ก วัยเรียน	2 (2-0-4)	revised code course and course description
TMSH 510 วขอร ๕๑๐	School Health Seminar สัมมนานามัยโรงเรียน	2 (2-0-4)	TMSH 514 วขอร ๕๑๔	School Health Seminars สัมมนานามัยโรงเรียน	2 (2-0-4)	revised code course and course description

The Mahidol University Council has approved the adjusted program in its 552nd meeting on January 15, 2020

Courses of Current Program			Courses of Revised Program			Remark
TMID 544 วขสว ๕๔๔	Research Methodology วิทยาระเบียบวิธีวิจัย	2 (2-0-4)	TMID 544 วขสว ๕๔๔	Research Methodology วิทยาระเบียบวิธีวิจัย	2 (2-0-4)	Unchanged
TMID 513 วขสว ๕๑๓	Biostatistics ชีวสถิติ	2 (2-0-4)	---			Cancelled
TMSH 507 วขอร ๕๐๗	Food in School Health อาหารสำหรับเด็กวัยเรียน	2 (2-0-4)	---			Moved to Elective Course
TMSH 508 วขอร ๕๐๘	Health Behavior พฤติกรรมสุขภาพ	2 (2-0-4)	---			Moved to Elective Course
---			TMSH 515 วขอร ๕๑๕	Epidemiology and Biostatistics in School Health วิทยาการระบาดและชีวสถิติทาง อนามัยโรงเรียน	2 (2-0-4)	New course
2) Elective course Plan A2 not less than 4 Credits Plan B not less than 6 Credits			2) Elective course Plan A2 not less than 4 Credits Plan B not less than 10 Credits			
TMSH 509 วขอร ๕๐๙	Literature Review การทบทวนวรรณกรรม	1 (0-2-1)	---			Closed
TMSE 501 วขวส ๕๐๑	Social Science Research Methodology ระเบียบวิธีวิทยาการวิจัยทาง สังคมศาสตร์	2 (2-0-4)	---			Cancelled
TMSE 503 วขวส ๕๐๓	Social Epidemiology วิทยาการระบาดทางสังคม	2 (2-0-4)	---			Cancelled
TMSE 504 วขวส ๕๐๔	Current Problems in Medical Social Sciences ปัญหาปัจจุบันทางสังคมศาสตร์ การแพทย์	2 (2-0-4)	---			Cancelled
TMSE 523 วขวส ๕๒๓	Environmental Health Impact Assessment การประเมินผลกระทบสุขภาพ สิ่งแวดล้อม	2 (1-2-3)	---			Cancelled
TMSE 527	Impact of Climate Change on Health	2 (2-0-4)	---			Cancelled

Courses of Current Program			Courses of Revised Program			Remark
วขอส ๕๒๗	ผลกระทบการเปลี่ยนแปลง สภาวะอากาศต่อสุขภาพ					
TMSE 529 วขอส ๕๒๙	Principle of Environmental Biotechnology หลักการทางเทคโนโลยีชีวภาพ สิ่งแวดล้อม	2 (2-0-4)	---			Cancelled
TMSH 511 วขอร ๕๑๑	Special Topics in School- Health Based Research หัวข้อพิเศษงานวิจัยด้านอนามัย โรงเรียน	2 (2-0-4)	TMSH 511 วขอร ๕๑๑	Special Topics in School- Health Based Research หัวข้อพิเศษการวิจัยบนพื้นฐาน ของอนามัยโรงเรียน	2 (2-0-4)	revised name of Thai course description
---			TMSH 516 วขอร ๕๑๖	Food for School Children อาหารสำหรับเด็กวัยเรียน	2 (2-0-4)	Move from required course and revised course code and course description (THSH 507)
---			TMSH 517 วขอร ๕๑๗	Health Behaviors of School Children พฤติกรรมสุขภาพของเด็กวัยเรียน	2 (2-0-4)	Move from required course and revised course code and course description (THSH 508)
---			TMSH 518 วขอร ๕๑๘	Instructional Media Design for School Health Promotions การออกแบบสื่อการสอนเพื่อ การส่งเสริมอนามัยโรงเรียน	2 (1-2-3)	New course
---			TMSE 524 วขอส ๕๒๔	Principles of Environmental Health and Toxicology หลักการทางสุขภาพสิ่งแวดล้อม และพิษวิทยา	2 (2-0-4)	Unchanged
TMSE 528 วขอส ๕๒๘	Environmental management การจัดการสิ่งแวดล้อม	2 (2-0-4)	TMSE 528 วขอส ๕๒๘	Environmental management การจัดการสิ่งแวดล้อม	2 (2-0-4)	Unchanged

Courses of Current Program			Courses of Revised Program			Remark
TMHG 549 วขสข ๕๔๙	Application of Geographical Information System (GIS) in Epidemiology การประยุกต์ระบบสารสนเทศภูมิศาสตร์ในวิทยาการระบาด	2 (1-2-3)	TMHG 549 วขสข ๕๔๙	Application of Geographical Information System (GIS) in Epidemiology การประยุกต์ระบบสารสนเทศภูมิศาสตร์ในวิทยาการระบาด	2 (1-2-3)	Unchanged
TMCD 519 วขอข ๕๑๙	AIDS โรคเอดส์	2 (2-0-4)	TMCD 519 วขอข ๕๑๙	AIDS โรคเอดส์	2 (2-0-4)	Unchanged
---			TMNU 506 วขภข 506	Nutrition โภชนศาสตร์	2 (2-0-4)	Adds course
3) Thesis 12 Credits			3) Thesis 12 Credits			
TMSH 698 วขอร ๖๙๘	Thesis วิทยานิพนธ์	12 (0-36-0)	TMSH 698 วขอร ๖๙๘	Thesis วิทยานิพนธ์	12 (0-36-0)	revised course description
4) Thematic Paper 6 Credits			4) Thematic Paper 6 Credits			
TMSH 697 วขอร ๖๙๗	Thematic Paper สารนิพนธ์	6 (0-18-0)	TMSH 697 วขอร ๖๙๗	Thematic Paper สารนิพนธ์	6 (0-18-0)	revised course description

6. The Comparison Table of the Curriculum Structure between the Current Program and Revised Program Based on Criteria on Graduate Studies B.E. 2558 (set by Ministry of Education)

The revision according to the Ministry of Education standard (MOE) 2015 is as follows:

6.1 Plan A2

Course Category	Credits		
	Criteria on Graduate Studies B.E. 2558	Curriculum Structure of the Current Program	Curriculum Structure of the Revised Program
1. Required courses	} Coursework at least 12 credits At least 12 credits	20	20
2. Elective course		4	4
3. Thesis		12	12
Total credits (not less than)	36	36	36

6.2 Plan B

Course Category	Credits		
	Criteria on Graduate Studies B.E. 2558	Curriculum Structure of the Current Program	Curriculum Structure of the Revised Program
1. Required courses	} Coursework at least 12 credits At least 6 credits	24	20
2. Elective course		6	10
3. Thematic Paper		6	6
Total credits (not less than)	36	36	36