



Mahidol University

Faculty of Medicine Ramathibodi Hospital

Section for Clinical Epidemiology and Biostatistics

Doctor of Philosophy Program in Clinical Epidemiology and Master of Science Program in Medical Epidemiology



Mahidol University
Faculty of Medicine Ramathibodi Hospital
Section for Clinical Epidemiology and Biostatistics

Program Committee

Ph.D. Director



Dr. Atiporn

M.Sc. Director



Dr. Sasivimol



Dr. Ammarin



Dr. Chusak



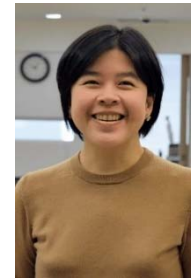
Dr. Patarawan



Dr. Viji



Dr. Sakda



Dr. Thunyarat



Dr. Oraluck



Dr. Pawin



Dr. Kunlawat

Wisdom of the Land



Mahidol University

Faculty of Medicine Ramathibodi Hospital

Section for Clinical Epidemiology and Biostatistics

Mission

“World class researchers with
international standard requirements”



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Faculty of Medicine Ramathibodi Hospital

Section for Clinical Epidemiology and Biostatistics

Expected learning outcomes (ELOs)

(Doctor of Philosophy Program in Clinical Epidemiology)

<u>ELOs 1.</u>	Be able to integrate and apply knowledge in clinical epidemiology, Evidence-based Medicine (EBM), Biostatistics, Health Social Science, Health Economics, and IT in their clinical/public health practice
<u>ELOs 2.</u>	Be able to apply EBM skills* for various questions in routine clinical practice
<u>ELOs 3.</u>	Be able to perform advanced statistical analysis for various clinical and health science researches
<u>ELOs 4.</u>	Be able to develop research protocol in clinical and health science researches using various study designs
<u>ELOs 5.</u>	Be able to conduct research complying with international ethical standards and collaborate with research teams
<u>ELOs 6.</u>	Be able to disseminate/communicate research findings or evidences to public by apply IT



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Section for Clinical Epidemiology and Biostatistics

Expected learning outcomes (ELOs)

Master of Science Program in Medical Epidemiology

- | | |
|----------------|--|
| ELOs 1. | Be able to understand Medical Epidemiology, Evidence-based Medicine (EBM), Biostatistics, Health Social Science, Health Economics, and IT in their clinical/public health practice |
| ELOs 2. | Be able to integrate and apply knowledge in Medical Epidemiology, Biostatistics, and research methodology |
| ELOs 3. | Be able to apply evidence-based medicine skills for various questions in routine clinical practice and research |
| ELOs 4. | Be able to perform statistical analysis for various medical or public health researches |
| ELOs 5. | Be able to develop research protocol in medical or public health researches |
| ELOs 6. | Be able to conduct research complying with international ethical standards and collaborate with research teams |
| ELOs 7. | Be able to disseminate/communicate research findings to public by apply information technology |



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Curriculum Structure

Program	Ph.D.		M.Sc.
	Plan 1	Plan 2	
Required/Core courses	-	23	20
Elective courses	-	4	4
Dissertation/Thesis	48	48	12
Total	48	75	36

Ph.D.

Plan 1: Research-based

Plan 2: Course work -based

Coursework and Thesis

Code	Subject	Credit	Course Coordinator
Required/Core courses			
RACE 622	Study Designs and Measurements in Clinical Epidemiology	3(2-2-5)	Assoc. Prof. Dr.Atiporn Ingsathit
RACE 625	Medical Statistics in Clinical Research	3(2-2-5)	Asst. Prof. Dr.Sasivimol Rattanasiri
RACE 611	Clinical Epidemiology and Evidence-based Medicine	3(1-4-4)	Assoc. Prof. Dr.Atiporn Ingsathit
RACE 624	Research Informatics and Data Management	3(2-2-5)	Dr.Oraluck Pattanaprateep/
*RAME 624		2(1-2-3)	Asst. Prof. Dr.Sakda Arj-Ong Vallibakara
RACE 626	Advanced Statistical Analysis in Clinical Research	3(2-2-5)	Prof. Dr.Ammarin Thakkinstian
RACE 603	Research Protocol Design	2(1-2-3)	Assoc. Prof. Dr.Patarawan Woratanarat
RACE 607	Clinical Economics	3(2-2-5)	Dr.Oraluck Pattanaprateep
*RAME 607		2(1-2-3)	
RACE 618	Systematic review & Meta-analysis	3(1-4-4)	Prof. Dr.Ammarin Thakkinstian
*RAME 618		2(1-2-3)	
Elective courses			
RACE 608	Social Science in Clinical Practice and Research	2(2-0-4)	Assoc. Prof. Dr.Kamolnetr Okanurak
RACE 617	Randomized Controlled Trial	2(1-2-3)	Assist. Prof. Dr.Chusak Okascharoen
Dissertation/Thesis			
RACE 898	Dissertation (Plan I)	48(0-192-0)	-
RACE 799	Dissertation (Plan II)	48(0-192-0)	-
RACE 698	Thesis (M.Sc.)	12(0-48-0)	-



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Timeframe for Coursework

Year	2019											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
								<u>Block 1</u> RACE 622 RACE 625		<u>Block 2</u> RACE 611 RACE/RAME 624		BREAK
	2020											
	<u>Block 3</u> RACE 608 RACE 626		<u>Block 4</u> RACE/RAME 607									
		RACE 603				<u>Block 5</u> RACE 617						
						RACE/RAME 618				Prepare Manuscript		Submit Manuscript
M.Sc.							Defend topic	Develop Proposal Grant/ Ethics	Conduct study		Manuscript	
Ph.D.									Qualifying Examination			Defend topic

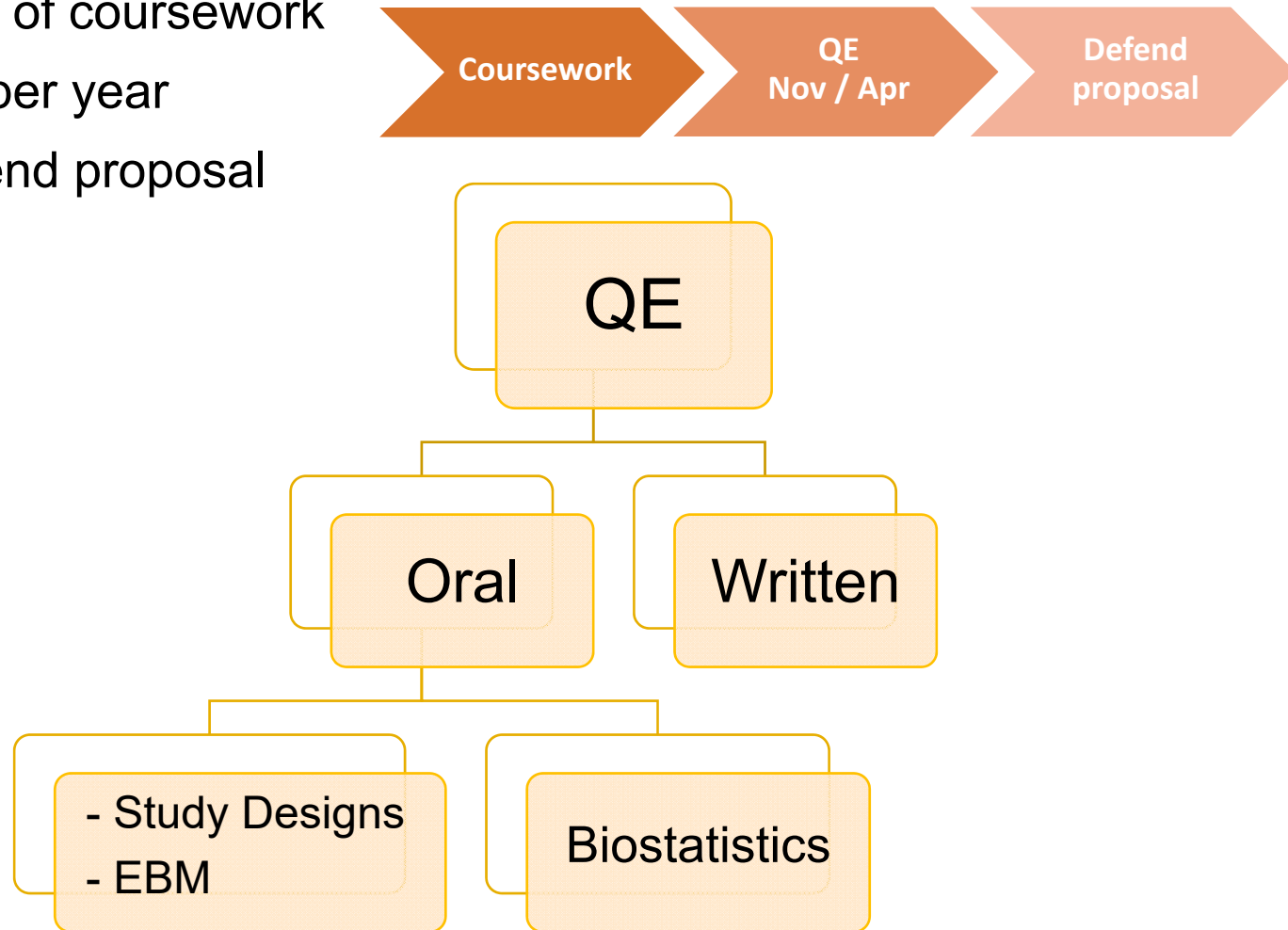


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Qualifying Examination for Ph.D.

- Completion of coursework
- Two times per year
- Before defend proposal





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Thesis

Ph.D.

- **Large scale or multi-center**
 - **Primary research**
 - RCT
 - Observational studies
 - cohort
 - case-control
 - cross-sectional
 - **Secondary research**
- **Research series**
 - 3-4 relevant small studies

M.Sc.

- **Systematic Review and meta - analysis**
- **Small scale**
 - RCT
 - Observational study
 - cohort
 - case-control
 - cross-sectional



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M.Sc. Timeframe for Research

Year	2020											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
M.Sc. RACE 698							Defend topic	Defend proposal	Conduct study	Manuscript		
	2021											
	Writing thesis		Defend thesis		Submit thesis							

PS: The 1st round research assistant scholarship in July

Wisdom of the Land



Timeframe for Ph.D. 2nd Data Research

Year												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2020	Course work							1 st MS			QE	DT
2021	DVP	DFP	EC & Grant		CS			CS & DR/DM				
2022	DA		2 nd MS WT		DFT		TS					

CS, Conduct study
 DA, Data analysis
 DM, Data management
 DR, Data retrieval
 DT, Defend topic
 DFP, Defend proposal
 DFT, Defend thesis
 DVP, Develop proposal
 MS, Manuscript
 TS, Thesis submission
 WT, Writing thesis



Timeframe for Ph.D. Primary Research

Year												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2020	Course work							1 st MS			QE	DT
2021	DVP	DFP	EC		Grant & Initiate study			CS & DC/DM				
2022	CS & DC & DM											
2023	DA		2 nd MS, WT		DFT		TS					



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Proposal/Thesis Evaluations (after coursework)

- **Set up terms of references (TOR)**
- **Progress based on TOR every 6 (Plan II, M.Sc.) / 2 (Plan I) months**
- **Evaluators:**
 - Supervisors and Ph.D. program committee
 - **Results**
 - Satisfy (S) $\geq 60\%$
 - In progression (P) 40% - 60%
 - Un-satisfy (U) $< 40\%$
 - 2 consecutive U = Terminate from the program
 - 3 consecutive P = 1 U



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Manuscripts

At least 1 manuscript for M.Sc.

Year 2 1st semester

1st MS

Systematic Review

Year 2 3rd semester – Year 3 of Conducting Research

2nd MS from research for
thesis

Years 3-4 –Thesis

3rd MS from research for
thesis

2-3 manuscripts for Ph.D.



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Graduation Requirements

M.Sc.

- Coursework not less than 24 credits and 12 credits for Thesis, **“B or higher”** in each course. (GPA \geq 3.00)
- Must pass English proficiency examination
 - TOEFL iBT > 54 or
 - IELTS \geq 5 or
 - TOEFL-ITP 480
 - MU GRAD TEST > 60
- Successfully defend thesis
- Must participate in skill development activities (Research, Language and communication, Information technology, and Leaderships and management)
(Soft skills: <http://www.grad.mahidol.ac.th/softskills/en/>)
- Thesis must have been Published
 - 1 manuscript for M.Sc.



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Graduation Requirements

Ph.D.

- Coursework not less than 27 credits and 48 credits for dissertation, **“B or higher”** in each course. (GPA \geq 3.00)
- Must pass English proficiency examination
 - TOEFL iBT > 61 or
 - IELTS \geq 5 or
 - TOEFL-ITP 500
- Must pass qualifying examination (2 failures will have to terminate/transfer to M.Sc.)
- Successfully defend thesis
- Must participate in skill development activities (Research, Language and Communication, Information Technology, and Leadership and Management)
(Soft skills: <http://www.grad.mahidol.ac.th/softskills/en/>)
- Dissertation must have been Published
 - 2-3 manuscripts for Ph.D.



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www.ceb-rama.org

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Clinical Epidemiology and Biostatistics

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Application for Ph.D. and M.Sc. (Epidemiology)

Application for Ph.D. and M.Sc. (Data Science for Health Care)

Ph.D., M.Sc. : Course Syllabus, Timetable, Handout and Materials

Ph.D., M.Sc.: Assignment Management



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Course work for Ph.D. and M.Sc. Student

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Time table for all courses

Topic	Academic Year		
RACE 622: Study Designs & Measurements in Clinical Epidemiology	2019	2018	2017
RACE 625: Medical Statistics in Clinical Research	2019	2018	2017
RACE 611: Clinical Epidemiology and Evidence-based Medicine	2019	2018	2017
RACE 624/RAME 624: Research Informatics and Data Management	2019	2018	2017

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Clinical Epidemiology and Biostatistics

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Application for Ph.D. and M.Sc. (Epidemiology)

Application for Ph.D. and M.Sc. (Data Science for Health Care)

Ph.D., M.Sc. : Course Syllabus, Timetable, Handout and Materials

Ph.D., M.Sc.: Assignment Management



[Assignment](#) : [Final exam and grade](#) : [Review Topics](#)

Name : admin [Logout](#)

Year : default 2017

Course :

Assignment :

Student ID :

Student Name : First name Last name



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Thank you