

## Course syllabus

TMCD 698 Thesis

Academic Year 2018-2022

1. **Institute** Mahidol University  
**Faculty/Department** Faculty of Tropical Medicine, Department of Clinical Tropical Medicine
2. **Course Name:**
  - a. **Course Code:** TMCD 698
  - b. **Course Title:** Thesis
3. **Number of credits:** 12 (0-36-0)
4. **Programme use:** Master of Clinical Tropical Medicine
5. **Prerequisite:** None
6. **Type of Course:** Core subject
7. **Condition: class size:** maximum 25
8. **Session/Academics year:** The second semester of 1<sup>st</sup> year
9. **Course description:**

Research proposal design for problem solving and quality development; research process, research operation; thesis presentation; research ethics; compilation and dissemination of research result; ethics in research dissemination
10. **Course expected learning outcomes:**

The students should be able to

  - 1) Analyse the problem, ask a proper research question and design the research to address the question
  - 2) Write the proposal, conduct research, data collection, analyse data and discussion the result of research work
  - 3) Exert the ethical consideration in research work
  - 4) Compose and disseminate the result of research work i.e. by presentation and publication in international peer review articles

## 11. Course outline and constructive alignment

	Title	Hours			Instructor	Course Learning Outcome	Programme ELOs	Learning Activities	Assessment
		Lecture	Practice	Self-study					
1	Selection of research topic and thesis advisor	0	30	0	Programme Director	1	-	Discussion	Research topic
2	Preparation of research proposal	0	80	0	Advisory Committee	1,2,3	1,2,3	Assignment, Discussion	Observation, Q&A
3	Defence of proposal	0	40	0	Defence of Proposal Committee	1,2,3	1,2,3,6	Presentation, Discussion, Q&A	Presentation/Discussion: Using Rubric assessment score
4	Ethical approval	0	40	0	Advisory Committee Ethical Committee	1,2,3	1	Ethical Submission	Ethical Approval
5	Data collection	0	160	0	Advisory Committee	1,2,3	4,5,6	Clinical record form, Discussion, Q&A	Accuracy of CRF, Progression of work Study site visit assessment, formative assessment using rubric scale
6	Data analysis	0	60	0	Advisory Committee	1,2,3	6	Analyse Discussion, Q&A	Result of part of Thesis, formative assessment using rubric scale
7	Thesis preparation	0	60	0	Advisory Committee	1,2,3,4	2,3,4,6	Presentation Discussion, Q&A	Progression of Thesis, formative assessment using rubric scale
8	Defence of thesis	0	40	0	Defence of Thesis Committee	1,2,3,4	1,2,3,4,5,6	Presentation Discussion, Q&A	Presentation/Discussion: Using Rubric assessment score, Thesis
9	Dissemination of research work	0	30	0	Advisory Committee	1,2,3,4	1,2,3,4,5,6,7	Presentation Publication	Acceptance for publication
	<b>Total</b>	<b>0</b>	<b>540</b>	<b>0</b>					

**12. Teaching and Learning Activities**

Discussion  
Assignment and follow up the progression  
Regular meeting and discussion  
Thesis

**13. Teaching media**

Research through internet database  
Microsoft Office and Citation Software  
Computer

**14. Course achievement and evaluation**

Defence of Proposal  
Ethical Approval of the research proposal: before data collection  
Defence of Thesis

**15. Course evaluation**

Discussion and comments session at the end of the course  
Questionnaire for contentment and suggestion for the course

**16. References**

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**17. Instructors:**

Staffs of Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University  
Advisory Committee  
External Examiners

**18. Course responsibility:**

Programme Director  
Department of Clinical Tropical Medicine, Faculty of Tropical Medicine, Mahidol University

**TMCD 698: Thesis  
Evaluation Form (Defense of Proposal)**

Lecturer \_\_\_\_\_

Role  Committee Chair  Committee Member

Date \_\_\_/\_\_\_/\_\_\_

Presenter: \_\_\_\_\_ (Total score \_\_\_\_\_)

1. Literature review (30 marks)

<input type="checkbox"/> 3 marks <25% of studies are updated	<input type="checkbox"/> 5 marks 25-50% of studies are updated	<input type="checkbox"/> 8 marks 51-75% of studies are updated	<input type="checkbox"/> 10 marks >75% of studies are updated
<input type="checkbox"/> 3 marks Review <25% of studies relevant to research question	<input type="checkbox"/> 5 marks Review 25-50% of studies relevant to research question	<input type="checkbox"/> 8 marks Review 51-75% of studies relevant to research question	<input type="checkbox"/> 10 marks Review >75% of studies relevant to research question
<input type="checkbox"/> 3 marks Show the gap (<25%) of previous studies that will be the origin of the present study research question	<input type="checkbox"/> 5 marks Show the gap (25-50%) of previous studies that will be the origin of the present study research question	<input type="checkbox"/> 8 marks Show the gap (51-75%) of previous studies that will be the origin of the present study research question	<input type="checkbox"/> 10 marks Definitely show the gap (>75%) of previous studies that will be the origin of the present study research question

2. Objectives (15 marks)

<input type="checkbox"/> 3 marks Objectives of the study are clearly defined and reasonable (<25%)	<input type="checkbox"/> 7 marks Objectives of the study are clearly defined and reasonable (25-50%)	<input type="checkbox"/> 11 marks Objectives of the study are clearly defined and reasonable (51-75%)	<input type="checkbox"/> 15 marks Objectives of the study are clearly defined and reasonable (>75%)
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3. Research methodology (45 marks)

<input type="checkbox"/> 3 marks Research methodology is designed appropriately to the objective of the study <25%	<input type="checkbox"/> 5 marks Research methodology is designed appropriately to the objective of the study 25-50%	<input type="checkbox"/> 8 marks Research methodology is designed appropriately to the objective of the study 51-75%	<input type="checkbox"/> 10 marks Research methodology is designed appropriately to the objective of the study >75%
<input type="checkbox"/> 3 marks Research methodology is practical and well-planned <25%	<input type="checkbox"/> 5 marks Research methodology is practical and well-planned 25-50%	<input type="checkbox"/> 8 marks Research methodology is practical and well-planned 51-75%	<input type="checkbox"/> 10 marks Research methodology is practical and well-planned >75%

<input type="checkbox"/> 3 marks Research methodology is under ethical consideration <25%	<input type="checkbox"/> 5 marks Research methodology is under ethical consideration 25-50%	<input type="checkbox"/> 8 marks Research methodology is under ethical consideration 51-75%	<input type="checkbox"/> 10 marks Research methodology is under ethical consideration >75%
<input type="checkbox"/> 0 mark Sample size calculation is incorrect	<input type="checkbox"/> 5 marks Sample size calculation is correct		
<input type="checkbox"/> 3 marks Case record form is easily to fill in and cover all data needed <25%	<input type="checkbox"/> 5 marks Case record form is easily to fill in and cover all data needed 25-50%	<input type="checkbox"/> 8 marks Case record form is easily to fill in and cover all data needed 51-75%	<input type="checkbox"/> 10 marks Case record form is easily to fill in and cover all data needed >75%

4. Presentation (10 marks)

4.1 Quality of slide presentation materials

<input type="checkbox"/> 1 marks Difficult to read Misspelling >75% of slides	<input type="checkbox"/> 2 marks Difficult to read 51-75% Misspelling 51-75%	<input type="checkbox"/> 3 marks Difficult to read 25-50% Misspelling 25-50%	<input type="checkbox"/> 4 marks Easy to read No misspelling
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4.2 Presentation skills (speaking style, distracted actions, eye contact)

<input type="checkbox"/> 1 marks Speak hardly heard and unclear Distracted action >45% No eye contact	<input type="checkbox"/> 2 marks Speak unclear 51-75% Distracted action 51-75% Eye contact 25-50%	<input type="checkbox"/> 3 marks Speak unclear 25-50% Distracted action 25-50% Eye contact 51-75%	<input type="checkbox"/> 4 marks Speak loud and clear No distracted action Eye contact with audiences
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4.3 Timing

<input type="checkbox"/> 1 marks > 30 minutes	<input type="checkbox"/> 2 marks ≤ 30 minutes
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Final Decision

- Overall
- Pass without condition
  - Pass with condition
  - Not Pass

**TMCD 698: Thesis  
Evaluation Form (Research work)**

(Preparation of research proposal 30%, Data collection 20%, Analyse data 30%, Teamwork 20%)

Role             Advisor             Co-advisor

Date            \_\_/\_\_/\_\_

Student Name: \_\_\_\_\_ (Total score \_\_\_\_\_)

**1. Preparation of research proposal (30 marks)**

<input type="checkbox"/> 5 marks <25% of content in proposal is clear and well-designed	<input type="checkbox"/> 10 marks 25-50% of content in proposal is clear and well-designed	<input type="checkbox"/> 15 marks 51-75% of content in proposal is clear and well-designed	<input type="checkbox"/> 20 marks >75% of content in proposal is clear and well-designed
<input type="checkbox"/> 2 marks Case record form is easily to fill in and cover all data needed <25%	<input type="checkbox"/> 5 marks Case record form is easily to fill in and cover all data needed 25-50%	<input type="checkbox"/> 8 marks Case record form is easily to fill in and cover all data needed 51-75%	<input type="checkbox"/> 10 marks Case record form is easily to fill in and cover all data needed >75%

**2. Data collection (20 marks)**

<input type="checkbox"/> 2 marks Well-planned and systematically collecting data <25%	<input type="checkbox"/> 5 marks Well-planned and systematically collecting data 25-50%	<input type="checkbox"/> 8 marks Well-planned and systematically collecting data 51-75%	<input type="checkbox"/> 10 marks Well-planned and systematically collecting data >75%
<input type="checkbox"/> 2 marks Collect data correctly and appropriately <25%	<input type="checkbox"/> 5 marks Collect data correctly and appropriately 25-50%	<input type="checkbox"/> 8 marks Collect data correctly and appropriately 51-75%	<input type="checkbox"/> 10 marks Collect data correctly and appropriately >75%

**3. Analyse data (30 marks)**

<input type="checkbox"/> 2 marks Use appropriate statistics to analyze data <25%	<input type="checkbox"/> 5 marks Use appropriate statistics to analyze data 25-50%	<input type="checkbox"/> 8 marks Use appropriate statistics to analyze data 51-75%	<input type="checkbox"/> 10 marks Use appropriate statistics to analyze data >75%
<input type="checkbox"/> 2 marks Good at using statistic programs and interpret results correctly <25%	<input type="checkbox"/> 5 marks Good at using statistic programs and interpret results correctly 25-50%	<input type="checkbox"/> 8 marks Good at using statistic programs and interpret results correctly 51-75%	<input type="checkbox"/> 10 marks Good at using statistic programs >75%
<input type="checkbox"/> 2 marks Interpret results correctly <25%	<input type="checkbox"/> 5 marks Interpret results correctly 25-50%	<input type="checkbox"/> 8 marks Interpret results correctly 51-75%	<input type="checkbox"/> 10 marks Interpret results correctly >75%

**4. Teamwork (20 marks)**

<input type="checkbox"/> 0 marks Cannot be leadership in team and good planning for work assignment <25%	<input type="checkbox"/> 2 marks Cannot be leadership in team and good planning for work assignment 25-50%	<input type="checkbox"/> 3 marks Good leadership in team and good planning for work assignment 51-75%	<input type="checkbox"/> 5 marks Good leadership in team and good planning for work assignment >75%
<input type="checkbox"/> 0 marks Good communication with team members <25%	<input type="checkbox"/> 2 marks Good communication with team members 25-50%	<input type="checkbox"/> 3 marks Good communication with team members 51-75%	<input type="checkbox"/> 5 marks Good communication with team members >75%
<input type="checkbox"/> 0 marks Give respect to all team members and open to receiving feedbacks and improving them <25%	<input type="checkbox"/> 2 marks Give respect to all team members and open to receiving feedbacks and improving them 25-50%	<input type="checkbox"/> 3 marks Give respect to all team members and open to receiving feedbacks and improving them 51-75%	<input type="checkbox"/> 5 marks Give respect to all team members and open to receiving feedbacks and improving them >75%
<input type="checkbox"/> 0 marks Good responsibility to works assigned <25%	<input type="checkbox"/> 2 marks Good responsibility to works assigned 25-50%	<input type="checkbox"/> 3 marks Good responsibility to works assigned 51-75%	<input type="checkbox"/> 5 marks Good responsibility to works assigned >75%

**TMCD 698: Thesis  
Evaluation Form (Writing Thesis)**

(Knowledge 20, Clear and flow 20, Full information 20, English 20, Reference formats 10, Computer skills 10)

Evaluator \_\_\_\_\_

Role             Chair/External Examiner         Advisor         Co-advisor

Date            \_\_\_/\_\_\_/\_\_\_

Student Name: \_\_\_\_\_ (Total score \_\_\_\_\_)

**Writing research proposal (100 marks)**

<input type="checkbox"/> 5 marks Good knowledge in tropical diseases relevant to the study <25%	<input type="checkbox"/> 10 marks Good knowledge in tropical diseases relevant to the study 25-50%	<input type="checkbox"/> 15 marks Good knowledge in tropical diseases relevant to the study 51-75%	<input type="checkbox"/> 20 marks Good knowledge in tropical diseases relevant to the study >75%
<input type="checkbox"/> 5 marks <25% of content in Thesis is clear and well-outlined	<input type="checkbox"/> 10 marks 25-50% of content in Thesis is clear and well-outlined	<input type="checkbox"/> 15 marks 51-75% of content in Thesis is clear and well-outlined	<input type="checkbox"/> 20 marks >75% of content in Thesis is clear and well-outlined
<input type="checkbox"/> 5 marks <25% of content in Thesis is well-informative, well-described	<input type="checkbox"/> 10 marks 25-50% of content in Thesis is well-informative, well-described	<input type="checkbox"/> 15 marks 51-75% of content in Thesis is well-informative, well-described	<input type="checkbox"/> 20 marks >75% of content in Thesis is well-informative, well-described
<input type="checkbox"/> 5 marks Good at English writing <25%	<input type="checkbox"/> 10 marks Good at English writing 25-50%	<input type="checkbox"/> 15 marks Good at English writing 51-75%	<input type="checkbox"/> 20 marks Good at English writing >75%
<input type="checkbox"/> 3 marks Reference format is correct <25%	<input type="checkbox"/> 5 marks Reference format is correct 25-50%	<input type="checkbox"/> 8 marks Reference format is correct 51-75%	<input type="checkbox"/> 10 marks Reference format is correct >75%
<input type="checkbox"/> 3 marks Good at computer programs used for making Thesis <25%	<input type="checkbox"/> 5 marks Good at computer programs used for making Thesis 25-50%	<input type="checkbox"/> 8 marks Good at computer programs used for making Thesis 51-75%	<input type="checkbox"/> 10 marks Good at computer programs used for making Thesis >75%

**TMCD 698: Thesis  
Evaluation Form (Defense of Thesis)**

Lecturer \_\_\_\_\_

Role             Chair/External Examiner             Advisor             Co-advisor

Date            \_\_/\_\_/\_\_

Presenter:            \_\_\_\_\_ (Total score \_\_\_\_\_)

1. Literature review (20 marks)

<input type="checkbox"/> 2 marks <25% of studies are updated	<input type="checkbox"/> 3 marks 25-50% of studies are updated	<input type="checkbox"/> 4 marks 51-75% of studies are updated	<input type="checkbox"/> 5 marks >75% of studies are updated
<input type="checkbox"/> 3 marks Review <25% of studies relevant to research question	<input type="checkbox"/> 5 marks Review 25-50% of studies relevant to research question	<input type="checkbox"/> 8 marks Review 51-75% of studies relevant to research question	<input type="checkbox"/> 10 marks Review >75% of studies relevant to research question
<input type="checkbox"/> 2 marks Show the gap (<25%) of previous studies that will be the origin of the present study research question	<input type="checkbox"/> 3 marks Show the gap (25-50%) of previous studies that will be the origin of the present study research question	<input type="checkbox"/> 4 marks Show the gap (51-75%) of previous studies that will be the origin of the present study research question	<input type="checkbox"/> 5 marks Definitely show the gap (>75%) of previous studies that will be the origin of the present study research question

2. Objectives and Research methodology (30 marks)

<input type="checkbox"/> 3 marks Some objectives of the study are clearly defined and reasonable	<input type="checkbox"/> 5 marks All objectives of the study are clearly defined and reasonable		
<input type="checkbox"/> 3 marks Appraise the appropriateness of the statistic used correctly <25%	<input type="checkbox"/> 5 marks Appraise the appropriateness of the statistic used correctly 25-50%	<input type="checkbox"/> 8 marks Research methodology is designed appropriately to the objective of the study 51-75%	<input type="checkbox"/> 10 marks Research methodology is designed appropriately to the objective of the study >75%
<input type="checkbox"/> 3 marks Research methodology is practical, well-planned and ethical consideration <25%	<input type="checkbox"/> 5 marks Research methodology is practical, well-planned and ethical consideration 25-50%	<input type="checkbox"/> 8 marks Research methodology is practical, well-planned and ethical consideration 51-75%	<input type="checkbox"/> 10 marks Research methodology is practical, well-planned and ethical consideration >75%
<input type="checkbox"/> 0 mark Sample size calculation is incorrect	<input type="checkbox"/> 5 marks Sample size calculation is correct		

3. Result (20 marks)

<input type="checkbox"/> 2 marks <25% of data are analyzed correctly with appropriate statistics	<input type="checkbox"/> 5 marks 25-50% of data are analyzed correctly with appropriate statistics	<input type="checkbox"/> 8 marks 51-75% of data are analyzed correctly with appropriate statistics	<input type="checkbox"/> 10 marks >75% of data are analyzed correctly with appropriate statistics
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<input type="checkbox"/> 2 marks <25% of analyzed data are interpreted correctly	<input type="checkbox"/> 5 marks 25-50% of analyzed data are interpreted correctly	<input type="checkbox"/> 8 marks 51-75% of analyzed data are interpreted correctly	<input type="checkbox"/> 10 marks >75% of analyzed data are interpreted correctly
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4. Discussion and conclusion (20 marks)

<input type="checkbox"/> 2 marks Discuss the results of the study compared with previous studies correctly <25%	<input type="checkbox"/> 4 marks Discuss the results of the study compared with previous studies correctly 25-50%	<input type="checkbox"/> 6 marks Discuss the results of the study compared with previous studies correctly 51-75%	<input type="checkbox"/> 8 marks Discuss the results of the study compared with previous studies correctly >75%
<input type="checkbox"/> 2 marks Discuss the limitations and the implication of the study correctly <25%	<input type="checkbox"/> 4 marks Discuss the limitations and the implication of the study correctly 25-50%	<input type="checkbox"/> 6 marks Discuss the limitations and the implication of the study correctly 51-75%	<input type="checkbox"/> 8 marks Discuss the limitations and the implication of the study correctly >75%
<input type="checkbox"/> 1 marks Conclude the important result of study correctly <25%	<input type="checkbox"/> 2 marks Conclude the important result of study correctly 25-50%	<input type="checkbox"/> 3 marks Conclude the important result of study correctly 51-75%	<input type="checkbox"/> 4 marks Conclude the important result of study correctly >75%

5. Presentation (10 marks)

5.1 Quality of slide presentation materials

<input type="checkbox"/> 1 marks Difficult to read Missed spelling >75% of slides	<input type="checkbox"/> 2 marks Difficult to read 51-75% Missed spelling 51-75%	<input type="checkbox"/> 3 marks Difficult to read 25-50% Missed spelling 25-50%	<input type="checkbox"/> 4 marks Easy to read No missed spelling
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5.2 Presentation skills (speaking style, distracted actions, eye contact)

<input type="checkbox"/> 1 marks Speak hardly heard and unclear Distracted action >45% No eye contact	<input type="checkbox"/> 2 marks Speak unclear 51-75% Distracted action 51-75% Eye contact 25-50%	<input type="checkbox"/> 3 marks Speak unclear 25-50% Distracted action 25-50% Eye contact 51-75%	<input type="checkbox"/> 4 marks Speak loud and clear No distracted action Eye contact with audiences
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5.3 Timing

<input type="checkbox"/> 1 marks > 30 minutes	<input type="checkbox"/> 2 marks ≤ 30 minutes
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**Final Decision**

- Overall
- Pass without condition
  - Pass with condition
  - Not Pass