

Student manual
for
Master of Science Program in
Precision Medical Microbiology
International Program
(Modified in 2021)



Name_____

Student ID_____

Advisor_____

Personal Details

Name _____ Nickname _____

Student ID _____

Personal ID _____

Address _____

E-mail _____

Enrolled for ☐ 1st ☐ 2nd Semester _____

General Advisor _____

Thesis Advisor

1. _____ Tel _____

2. _____ Tel _____

3. _____ Tel _____

Proposed thesis proposal examination date _____

Proposed thesis examination date _____

Thesis book submission date _____

University council approval date _____

Graduation ceremony date _____

Emergency contact info

1. _____ Relationship _____ Tel _____

2. _____ Relationship _____ Tel _____

3. _____ Relationship _____ Tel _____

Foreword

This manual aim to list guides for students necessary to complete precision medical microbiology program. Students are encouraged to dedicate time and determination to persuade their coursework and program. Students are expected to read and understand all necessary protocol listed by the program curriculum.

Program coordinators and committee

June 2024

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Master of Science Program in Precision Medical Microbiology

International Program

(Modified in 2021)

Program Learning Outcomes (PLOs)

ELO 1. Apply and Integrate Knowledge in Precision Medical Microbiology

Be able to apply and integrate basic knowledge in the fields of Precision Medical Microbiology, Immunology, diagnosis and modern molecular techniques

ELO 2. Generate Research and/or Innovation in Precision Medical Microbiology

Be able to generate the research finding with national or international recognition and/or innovation in the fields of Precision Medical Microbiology related to the problems from community, society, economics and environments

ELO 3. Analyze Data (Data analysis skills) in Precision Medical Microbiology

Be able to analyze high throughput data, biostatistics and bioinformatics in Precision Medical Microbiology

ELO 4. Design and Execute experiments and/or study (Experimental technique skills) in Precision Medical Microbiology

Be able to design and execute experiments and/or study using molecular techniques in Precision Medical Microbiology, and related fields

ELO 5. Demonstrate Life-long Learning and Information Literacy

Be able to demonstrate characteristics of life-long learning and information literacy for academic, research and innovation in medicine and other fields

ELO 6. Use English Language for Communication

Be able to use English language for communication and presentation in the class AND in the conference or journal in national or international level

ELO 7. Demonstrate Systematic, Critical Thinking, Criticism

Be able to demonstrate characteristics of systematic thinking, critical thinking and criticism for related research and innovation

ELO 8. Demonstrate Ethical Behavior of Precision Medical Microbiologist

Be able to demonstrate the ethical behavior in academic and regulations related to the fields of Precision Medical Microbiology

ELO 9. Demonstrate Professional Skills

Be able to demonstrate professional skills including leadership, interpersonal skills, flexibility, productivity and community engagement

Program structure

Subject groups	Plan A Type A1 ^c (Credits)	Plan A Type A2 ^c (Credits)
Compulsory 1	-	6
Compulsory 2	- ^a	8 ^b
Elective	-	6
Thesis	36	16
Total credits (minimal requirement)	36	36

^acontains 4 subjects with no need for enrollment (AU) *MD627 893 Seminar in medical microbiology 2(2-0-4), *MD627 101 Peer Review in Medical Microbiology Research I 1(1-0-2), *MD627 102 Peer Review in Medical Microbiology Research II 1(1-0-2) and MD627 103 Peer Review in Medical Microbiology Research III 1(1-0-2)

^bcontains 1 subject with no need for enrollment (AU) (AU) 1 subject: *MD627 102 Peer Review in Medical Microbiology Research II 1(1-0-2)

^cStudents will develop their skills in precision medical microbiology through seminar and peer review subjects (particularly A1 program)

Enrollment for subjects

Prior to enrollment, students are required to consult their advisors about which subjects are suited best for their studies. Enrollment must be completed via the website <http://reg.kku.ac.th>. Students must print out the enrollment form which display numbers of credits/hours of each subject. The form must be signed by tentative advisor and program chairperson before sending to a department administrative officer.

Eligible criteria for program coordinators/committees

	M.Sc.	Ph.D.
<u>Program coordinators</u> Coordinators are consisted of three members who manage and develop the program.	- Ph.D. or equivalent <u>or</u> M.Sc. with Associated Professor - have at least 3 published papers in the last 5 years(at least one must be research article)	- Ph.D. or equivalent <u>or</u> M.Sc. with Associated Professor - have at least 3 published papers in the last 5 years(at least one must be research article)
<u>Program committees</u> Committees are staffs who have expertise relevant to the program.	- Ph.D. or equivalent <u>or</u> M.Sc. with Associated Professor - have at least 3 published papers in the last 5 years(at least one must be research article)	- Ph.D. or equivalent <u>or</u> M.Sc. with Associated Professor - have at least 3 published papers in the last 5 years(at least one must be research article)

Eligible criteria for advisor and co-advisor

<input type="checkbox"/> Must be a member of program committees <input type="checkbox"/> Ph.D. or equivalent <u>or</u> M.Sc. with Associated Professor position <input type="checkbox"/> Have at least 3 published papers in the last 5 years (at least one must be research article)

To nominate advisor and co- advisors, students are required to fill in Grad. 21 (<http://gs.kku.ac.th>) before the commence of the semester in which the thesis is registered.

Guide for selection of advisor and co-advisor

Program	Number of advisor		Total
	Advisor	Co-advisor	
M.Sc.	1	Unlimited (Project dependent)	At least 1
Ph.D.	1	Unlimited (Project dependent)	At least 1

Number of students per advisor

Qualification/position	Number of students	
	Advisee	Co-advisee
Lecturer	No more than 5	Unlimited
Assistant Professor	No more than 10	Unlimited
Associated Professor	No more than 10	Unlimited
Professor	No more than 15	Unlimited

Proposal and thesis must be written in English only

Criteria for graduation

Plan A Type A1	Plan A Type A2
<ul style="list-style-type: none"> - Have knowledge of English that meets the standard criteria as announced by the Graduate School. - Present a thesis and pass the final oral examination evaluated by thesis examination committee. - Have evidence of accepted manuscript or publish original paper in national/international journal to fulfill the scholarship (if any) 	<ul style="list-style-type: none"> - Have knowledge of English that meets the standard criteria as announced by the Graduate School. - Complete all coursework with GPA more than 3.00 - Present a thesis and pass the final oral examination evaluated by thesis examination committee. - Have evidence of accepted manuscript or publish original paper in national/international journal to fulfill the scholarship (if any) or attend proceeding at the conference

Evaluation criteria for the thesis

Evaluation	A1 36 credits (MD 627 898)	A2 16 credits (MD 627 899)
1. Proposal		
Literature review	2	1
Proposal book	3	1
2. Experiment		
Methods, Statistic analysis,	16	8
Analysis, Interpretation	10	3
3. Thesis		
Thesis drat submission	1	1
Thesis book submission	2	1
4. Presentation		
Presentation at conferences	2	1
Total	36	16

Procedure and Policies

1. Cancellation of candidature
 - 1.1. Pass less than 50% of all subjects and GPA < 2.5
 - 1.2. Overspend the maximum time of candidature
M.Sc.:5 semesters
 - 1.3. No progress for the consecutive two semesters (0= S for thesis for the consecutive two semesters)
 - 1.4. Failed qualified examination with second attempt
 - 1.5. Misconduct and has been punished
2. M.Sc. students who plan to be promoted to Ph.D. must complete at least 12 credits and have a GPA not less than 3.5 before undergoing for qualification examination.
3. Students who have finished their coursework and thesis but not yet graduate must keep their enrolment status active to sustain their candidature.

Academic Staffs in Department of Microbiology

Name	Qualification
Asst. Prof. Dr. Thitima Nutrawong	Dr.PH. (International)
Assoc. Prof. Dr. Sorujisiri chareonsudjai	Ph.D. (Microbiology)
Assoc. Prof. Chulapan Engchanil	MD. (Pediatrics)
Asst. Prof. Suwin Wongwajana	MD./M.Sc. (Microbiology)
Asst. Prof.Dr. Kittipan Samerpitak	Ph.D. (Medical Mycology)
Asst. Prof. Dr. Wiset Namwat	Ph.D. (Engineering-Biotechnology)
Prof. Dr. Kiatichai Faksri	Ph.D. (Medical Microbiology)
Asst. Prof. Dr. Sakawrat Kanthawong	Ph.D. (Medical Microbiology)
Asst. Prof. Dr. Umaporn Yodpratum	Ph.D. (Medical Biochemistry)
Asst. Prof. Dr. Supranee Phanthanawiboon	Ph.D. (Medical Science)
Asst. Prof. Dr. Sirinart Aromseree	Ph.D. (Medical Microbiology)
Asst. Prof. Dr. Chonlatip Pipattanaboon	Ph.D. (Tropical Medicine)
Asst. Prof. Dr. Wisitsak Phoksawat	Ph.D. (Biomedical Science)
Asst. Prof. Dr. Arnone Nithichanon	Ph.D. (Biomedical Science)
Dr. Auttawit Sirichoat	Ph.D. (Medical Microbiology)
Dr. Suwalak Chitcharoen	Ph.D. (Bioinformatics and Computational Biology)
Dr. Pratsanee Hiangraj	Ph.D. (Medical Microbiology)
Dr. Chukkris Heawchaiyaphum	Ph.D. (Medical Microbiology)

Lesson plan (1st Semester Year 1)

M.Sc. (Precision Medical Microbiology)

Subject code	Subject name	Credits/Hours	
		A1	A2
MD 627 703	Molecular and Cellular Biology	-	1 (1-0-2)
MD 627 704	Medical Microbiology	-	2 (2-0-4)
MD 627 705	Research Methodology and Molecular Techniques	-	1 (1-0-2)
MD 627 706	Principles of Diagnostic Microbiology	-	1 (1-0-2)
MD 627 707	Essential Immunology	-	1 (1-0-2)
MD 627 709	Practices in Medical Microbiology Laboratory	-	2 (1-3-4)
XXX XXX	Elective (see page 13)	-	1 (X-X-X)
MD 627 898	Thesis*	9 (0-0-0)	-
	Total	9 Credits	9 Credits

Actual registered credit _____

Credit for Thesis _____

Advisor signature

(_____)

Date ____/____/____

* student who plan to enroll for thesis must nominate potential advisor first. To nominate advisor and co-advisors, students are required to fill in Grad.21 (<http://gs.kku.ac.th>) before the commence of the semester in which the thesis is registered.

Documents required to submit a department administrative officer (1st Semester Year 1)

Document	Advisor signed	Department administrative officer signed	Received Date
Semester started			
Documents for enrolled subject downloaded from Reg website			
Form Grad.04 (only A1)			
Grad.21 (only A1)			
Semester closing			
Grade results			
GSMIS			
Form Grad.04 (only A1)			

Lesson plan (2nd Semester Year 1)

M.Sc. (Precision Medical Microbiology)

Subject code	Subject name	Credits/Hours	
		A1	A2
MD 627 708	Essential Skills for Biomedical Research	-	1 (0.5-1.5-2)
MD 627 710	Bioinformatics and Big Data Analysis	-	2 (1-3-4)
MD 627 893	Seminar in Medical Microbiology	Attend without enrollment	Attend without enrollment
MD 627 101	Peer Review in Medical Microbiology Research I	1 (1-0-2) (No credit counted)	-
XXX XXX	Elective (see page 13)	-	6 (X-X-X)
MD 627 898	Thesis	9 (0-0-0)	-
MD 627 899	Thesis*	-	3 (0-0-0)
	รวม	9 credits	12 credits

Actual registered credit _____

Credit for Thesis _____

Advisor signature

(_____)

Date ____/____/____

*student who plan to enroll for thesis must nominate potential advisor first. To nominate advisor and co-advisors, students are required to fill in Grad.21 (<http://gs.kku.ac.th>) before the commence of the semester in which the thesis is registered.

Documents required to submit a department administrative officer (2nd Semester Year 1)

Document	Advisor signed	Department administrative officer signed	Received Date
Semester started			
Documents for enrolled subject downloaded from Reg website			
Grad.04			
Grad.21 (only A2)			
Semester closing			
Grade results			
GSMIS			
Grad.04			

Lesson plan (1st Semester Year 2)

M.Sc. (Precision Medical Microbiology)

Subject code	Subject name	Credits/Hours	
		A1	A2
MD 627 893	Seminar in Medical Microbiology	2 (2-0-4) (No credit counted)	2 (2-0-4)
MD 627 101	Peer Review in Medical Microbiology Research I	-	1 (1-0-2)
MD 627 102	Peer Review in Medical Microbiology Research II	1 (1-0-2) (No credit counted)	-
MD 627 898	Thesis	9 (0-0-0)	-
MD 627 899	Thesis	-	8 (0-0-0)
	Total	9 Credits	11 Credits

Credit enrolled for Thesis (previous) _____

Credit with S _____

Remaining credit _____

Credit enrolled for this semester _____

Advisor signature

(_____)

Date ____/____/____

Documents required to submit a department administrative officer (1st semester Year 2)

Document	Advisor signed	A department administrative officer signed	Received Date
Semester started			
Documents for enrolled subject downloaded from Reg website			
Grad.04			
Semester closing			
Grade results			
GSMIS			
Grad.04			

Lesson plan (2nd Semester Year 2)

M.Sc. (Precision Medical Microbiology)

Subject code	Subject	Credit/Hour	
		A1	A2
MD 627 102	Peer Review in Medical Microbiology Research II	-	1 (1-0-2) (No credit counted)
MD 627 103	Peer Review in Medical Microbiology Research III	1 (1-0-2) (No credit counted)	-
MD 627 898	Thesis	9 (0-0-0)	-
MD 627 899	Thesis	-	5 (0-0-0)
	Total	9 Credits	5 Credits

Credit enrolled for Thesis

(previous) _____

Credit with S _____

Remaining credit _____

Credit enrolled for this semester _____

Advisor signature

()

Date ____/____/____

Documents required to submit a department administrative officer (2nd Semester Year 2)

Document	Advisor signed	Department administrative officer signed	Received Date
Semester started			
Documents for enrolled subject downloaded from Reg website			
Grad.04			
Semester closing			
Grade results			
GSMIS			
Grad.04			

Elective Subjects (6 Credits)

Students are eligible for enrollment in elective subjects listed below. Total credits must be at least 6 credits.

MD 627 711	Advanced Research and Innovation Management	1(1-0-2)
MD 627 713	Specialized Research Skills in Medical Microbiology	4(3-3-8)
MD 627 720	Advanced Immunology	2(2-0-4)
MD 627 721	Advanced Bacteriology	2(2-0-4)
MD 627 722	Advanced Virology	2(2-0-4)
MD 627 723	Advanced Mycology	2(2-0-4)
MD 627 724	Biosafety and Biosecurity	1(1-0-2)

Guide for preparation for thesis proposal examination

Students must pass the thesis proposal examination within one year after commencing their thesis. The documents required are listed below. (For more information, contact a department administrative officer)

Prior examination (submit all documents to a department administrative officer at least 15 days before the proposed date)

- ☐ **Grad.05 Proposal Examination Entry Form for Thesis** (Download via Grad Med KKU website <https://home.kku.ac.th/acamed/Graduate.html>)

Proposed date _____

- ☐ **Grad.06 Request for Accreditation of the Proposal Examination Committee for the Thesis** (Download via Grad Med KKU website)

No. of committees _____ (with CV of all of committees)

1. _____
2. _____
3. _____
4. _____

- ☐ **Academic Transcript** (Print from reg.kku.ac.th)

- ☐ **Poster** (Announcement for proposal Examination)

Advisor

Admin

(_____)

Date ____/____/____

(_____)

Date ____/____/____

After examination (within 45 days)

- ☐ **GS.23:** Submit Form for Thesis Proposal (submit online form via <https://forms.gs.kku.ac.th/>)

- ☐ **Turnitin Originality Report form** (ask from a department administrative officer) + The first page and the last page (that shows %SIMILARITY INDEX) of the Turnitin Originality Report

Advisor

Admin

(_____)

Date ____/____/____

(_____)

Date ____/____/____

Guide for preparation for thesis defense examination

Students must arrange thesis examination 45 days before their last semester. The documents required are listed below. (Contact a department administrative officer)

To arrange the examination date, all of these documents must be sent to a department administrative officer at least 15 days before the proposed date)

- ☐ **KKU.11** Contact a Graduate officer of the Faculty of Medicine (6th floor) for a request form
- ☐ **Academic transcript** (print from reg.kku.ac.th)
- ☐ **Grad.04 Registration and Evaluation Form for Thesis/Dissertation**
- ☐ **GS.25:** Requesting for Defense of Thesis (submit online form via <https://forms.gs.kku.ac.th/>)
- ☐ **GS.26:** Appointment of Thesis Committee (submit online form via <https://forms.gs.kku.ac.th/>)
apply by a department administrative officer
- ☐ **Poster** (Announcement for Thesis Examination)
- ☐ **Turnitin Originality Report form** (ask from a department administrative officer) + The first page and the last page (that shows %SIMILARITY INDEX) of the Turnitin Originality Report

Committee of thesis defense examination

Program	Number of committees
M.Sc.	At least 3 members; contain at least one from external committee. The rest must be a members of program committees. Chairman must not be student's advisors.
Ph.D.	At least 5 members; contain at least one from external committee. The rest must be a members of program committees. Chairman must be student's external committee.

*External committee must have hold Ph.D. or equivalent and have at least 10 national/international publications

Number of committees (inform a department administrative officer for the invitation letter)

1. _____
2. _____
3. _____
4. _____
5. _____

Advisor

Admin

(_____)

Date ____/____/____

(_____)

Date ____/____/____

After completion of the thesis defense examination

(within five days) documents submitted to a department administrative officer

- ☐ **GS.27:** Report Form for Examination Results of Thesis (Hard copy) with the signatures of all Thesis committee and Turnitin Originality Report form (Hard copy)
- ☐ **GS.27.1** Record form for the main point and editing list (pass with conditions) (Hard copy)
- ☐ **GS.27:** Report Form for Examination Results of Thesis (submit online form via <https://forms.gs.kku.ac.th/>)

(Within 45 days after examination) The document must be submitted to E-Thesis

(<https://app.gs.kku.ac.th/gs/th/page/e-Thesis/>)

- ☐ **GS.28:** Form for Correction of Thesis (submit online form via <https://forms.gs.kku.ac.th/>)
- ☐ **GS.29:** Checklist for Thesis format
- ☐ **GS.37:** Publication of Thesis
- ☐ **GS.20:** Requesting Degree and Debt Checking
- ☐ **Thesis book File** (with approval of all committees by E-signature)
- ☐ **Turnitin Originality Report form** (ask from a department administrative officer) + The first page and the last page (that shows %SIMILARITY INDEX) of the Turnitin Originality Report

Advisor

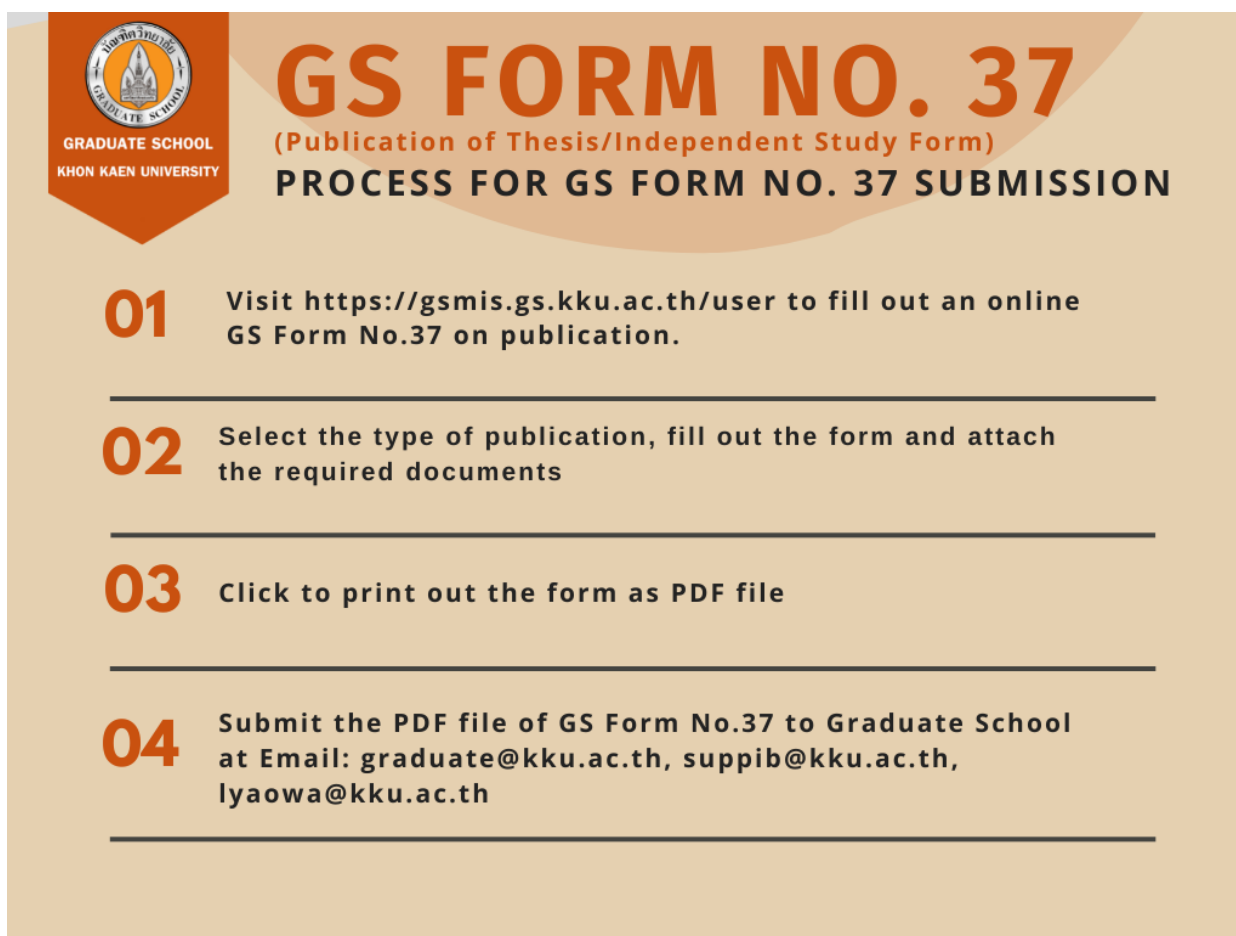
(_____)
Date ____/____/____

Admin

(_____)
Date ____/____/____

****Students must completed all these steps within 45 days after thesis defense examination date. Late submission will result in cancellation of the examination.**

Process for GS Form No. 37 Submission (Publication of Thesis/Independent Study Form)



GS FORM NO. 37
(Publication of Thesis/Independent Study Form)
PROCESS FOR GS FORM NO. 37 SUBMISSION

01 Visit <https://gsmis.gs.kku.ac.th/user> to fill out an online GS Form No.37 on publication.

02 Select the type of publication, fill out the form and attach the required documents

03 Click to print out the form as PDF file

04 Submit the PDF file of GS Form No.37 to Graduate School at Email: graduate@kku.ac.th, suppib@kku.ac.th, lyaowa@kku.ac.th

follow these steps.

Process for GS Form No. 37 Submission (Publication of Thesis/Independent Study Form)

1. Visit <https://gsmis.gs.kku.ac.th/user> to fill out an online GS Form No.37 on publication
2. Select the type of publication, fill out the form, and attach the required documents
3. Click to print out the form as a PDF file
4. Submit the PDF file of GS Form No.37 to Graduate School at Email: graduate@kku.ac.th, suppib@kku.ac.th

In case your Program Type is Plan B please submit to email: lyaowa@kku.ac.th

Please provide the details including full name, and student ID, and attach the completed GS form No.37 file with the email.

For more information, contact us at:

Facebook: <https://fb.com/graduateschoolkku>