

Doctor of Philosophy
Program in Tropical Medicine International Program
(Updated version, 2013)

1. Degree Program : Doctor of Philosophy Program in Tropical Medicine
(International Program)

2. Degree Offered : Doctor of Philosophy (Tropical Medicine)
Ph.D. (Tropical Medicine)

3. Responsible Department/Faculty

Faculty of Medicine, Khon Kaen University.
Graduate School, Khon kaen University.

4. Objectives :

The international program for Ph.D. in Tropical Medicine (Edited program, 2013) aims to produce Ph.D. graduates who have the following features.

(1) An understanding deeply in the fields of Medical Biochemistry and Molecular Biology for applying the knowledge to conduct a research or to work in international level.

(2) The ability to conduct a research or to manage an academic project that leads to the development of knowledge or innovation in Medical Biochemistry and Molecular Biology and related fields.

(3) The ability to think critically, analyze, synthesize, communicate, use computers and information technology as well as manage with modern technology that leads to the development of knowledge and use in international level.

(4) Moral, ethics, integrity in academic work, leadership in promoting the spiritual, moral and ethical conduct, academic and professional ethics, and interpersonal skills and responsibility.

5. Curriculum

5.1 Total Credit Hours

Total Credit hours for Type 1.1 Program not less than 48 Credits

Total Credit hours for Type 2.1 Program not less than 48 Credits

Total Credit hours for Type 2.2 Program not less than 72 Credits

5.2 Program Structures

| | Number Credits | | |
|-----------------------|-----------------|----------|----------|
| | Type 1.1 | Type 2.2 | Type 2.1 |
| 1) Compulsory courses | 3 (non credits) | 9 | 9 |
| 2) Elective courses | - | 3 | 15 |
| 3) Dissertation | 48 | 36 | 48 |
| Total | 48 | 48 | 72 |

6. Courses

6.1 Compulsory courses:

Type 1.1 Program (Non Credits)

| | | |
|----------|---|----------|
| *359 991 | Seminar in Advanced Tropical Medicine I | 1(1-0-2) |
| *359 992 | Seminar in Advanced Tropical Medicine II | 1(1-0-2) |
| *359 993 | Seminar in Advanced Tropical Medicine III | 1(1-0-2) |

Type 2.1 Program

| | | |
|----------|---|----------|
| *359 701 | Tropical Medicine | 3(3-0-6) |
| 356 714 | Medical Science Research Methodology | 3(2-3-6) |
| *359 991 | Seminar in Advanced Tropical Medicine I | 1(1-0-2) |
| *359 992 | Seminar in Advanced Tropical Medicine II | 1(1-0-2) |
| *359 993 | Seminar in Advanced Tropical Medicine III | 1(1-0-2) |

Type 2.2 Program : Students must register at least 9 credits of the course listed below or some additional courses which will be notified later with the permission of the Program Executive Committee.

| | | |
|----------|---|----------|
| *359 701 | Tropical Medicine | 3(3-0-6) |
| 356 714 | Medical Science Research Methodology | 3(2-3-6) |
| *359 991 | Seminar in Advanced Tropical Medicine I | 1(1-0-2) |

| | | |
|----------|---|----------|
| *359 992 | Seminar in Advanced Tropical Medicine II | 1(1-0-2) |
| *359 993 | Seminar in Advanced Tropical Medicine III | 1(1-0-2) |

6.2 Elective courses :

Type 1.1 Program : None

Type 2.1 Program : Not less than 3 Credits

Students can choose the courses according to the permission of the Program Executive Committee as listed below or some additional courses in related graduate levels with the permission of the Program Executive Committee.

| | | |
|----------|---|----------|
| 356 712 | Cells and Molecular Biology | 3(3-0-6) |
| *359 710 | Advanced Tropical Medicine | 1(1-0-2) |
| *359 711 | Tropical Disease Control | 2(2-0-4) |
| *359 712 | Experience in tropical Health | 2(2-0-4) |
| 362 712 | Infection and Immunity I | 2(2-0-4) |
| 362 713 | Infection and Immunity II | 4(4-0-8) |
| 363 711 | Medical Nutrition | 2(2-0-4) |
| 363 718 | Principles and Techniques in Molecular Biology | 1(1-0-2) |
| 364 701 | Medical Parasitology | 4(3-3-8) |
| 363 718 | Medical Entomology | 2(1-3-4) |
| 364 712 | Medical Malacology | 2(1-3-4) |
| 364 716 | Immunology of Parasitic Infections | 2(2-0-4) |
| *365 743 | Tropical Pathology | 2(2-0-4) |
| *366 743 | Principle of Medicinal Plant Development and Pharmacological Testing | 3(2-1-5) |
| *366 744 | Natural Products in Medicine | 2(2-0-4) |
| *366 745 | Clinical Pharmacology in Tropical Medicine I | 2(2-0-4) |
| *379 794 | Clinical Tropical Infectious Diseases | 2(1-3-4) |
| 381 703 | Health Systems Management | 3(3-0-6) |

Type 2.2 Program : The course is designed to encourage students to get knowledge and research skills in Medical Biochemistry and Molecular Biology and in related fields. Students must register at least 15 credits according to the guidance of their advisor with the permission of the Program Executive Committee.

| | | |
|----------|--|----------|
| *356 712 | Cell Molecular and Biology | 3(3-0-6) |
| *359 710 | Advanced Tropical Medicine | 1(1-0-2) |
| *359 711 | Tropical Disease Control | 2(2-0-4) |
| *359 712 | Experience in tropical Health | 2(2-0-4) |
| *362 712 | Infection and Immunity I | 2(2-0-4) |
| *362 713 | Infection and Immunity II | 4(4-0-8) |
| 363711 | Medical Nutrition | 2(2-0-4) |
| 363718 | Principles and Techniques in Molecular Biology | 1(1-0-2) |
| 364 701 | Medical Parasitology | 4(3-3-8) |
| 364 711 | Medical Entomology | 2(1-3-4) |
| 364 712 | Medical Malacology | 2(1-3-4) |
| 364 716 | Immunology of Parasitic Infections | 2(2-0-4) |
| *365 743 | Tropical Pathology | 2(2-0-4) |
| *366 744 | Natural Products in Medicine | 2(2-0-4) |
| *366 743 | Principle of Medicinal Plant Development and Pharmacological Testing | 3(2-3-5) |
| *366 745 | Clinical Pharmacology in Tropical Medicine I | 2(2-0-4) |
| 374 754 | Community Epidemiology | 2(1-3-4) |
| *379 794 | Clinical Systems Management | 3(3-0-6) |
| 381 703 | Health Systems Management | 3(3-0-6) |

6.3 Dissertation

Type 1.1 Program :

| | | |
|----------|--------|------------|
| *359 997 | Thesis | 48 Credits |
|----------|--------|------------|

Type 2.1 Program :

*359 999 Thesis 36 Credits

Type 2.2 Program :

*359 998 Thesis 48 Credits

7. Class Schedule

Plan for Type 1.1

| Course | Year 1,First semester | Credit |
|----------|--------------------------|----------|
| Code | Course Name | Type 1.1 |
| *359 997 | Dissertation | 9 |
| | Total Credits registered | 9 |
| | Sum of the credits | 9 |

| Course | Year 1, Second semester | Credit |
|----------|--|---------------------------|
| Code | Course Name | Type 1.1 |
| *359 991 | Seminar in Advance Tropical Medicine I | 1(1-0-2) Noncredit course |
| *359 997 | Dissertation | 9 |
| | Total Credits registered | 9 |
| | Sum of the credits | 18 |

| Course | Year 2,First semester | Credit |
|----------|---|---------------------------|
| Code | Course Name | Type 1.1 |
| *359 992 | Seminar in Advance Tropical Medicine II | 1(1-0-2) Noncredit course |
| *359 997 | Dissertation | 9 |
| | Total Credits registered | 9 |
| | Sum of the credits | 27 |

| Course | Year 2,Second semester | Credit |
|----------|--|---------------------------|
| Code | Course Name | Type 1.1 |
| *359 993 | Seminar in Advance Tropical Medicine III | 1(1-0-2) Noncredit course |
| *359 997 | Dissertation | 9 |
| | Total Credits registered | 9 |
| | Sum of the credits | 36 |

| Course | Year 3,First semester | Credit |
|----------|--------------------------|----------|
| Code | Course Name | Type 1.1 |
| *359 997 | Dissertation | 9 |
| | Total Credits registered | 9 |
| | Sum of the credits | 45 |

| Course | Year 3,Second semester | Credit |
|----------|--------------------------|----------|
| Code | Course Name | Type 1.1 |
| *359 997 | Dissertation | 9 |
| | Total Credits registered | 9 |
| | Sum of the credits | 48 |

Plan for Type 2.1 and 2.2

| Course | Year 1,First semester | Credit | |
|----------|--------------------------|----------|----------|
| Code | Course Name | Type 2.1 | Type 2.1 |
| *359 701 | Tropical Medicine | 3(3-0-6) | 3(3-0-6) |
| XXX XXX | Elective course | 3 | 6 |
| *359 999 | Dissertation | 3 | - |
| | Total Credits registered | 9 | 9 |
| | Sum of the credits | 9 | 9 |

| Course | Year 1,Second semester | Credit | |
|--------|------------------------|----------|----------|
| Code | Course Name | Type 2.1 | Type 2.1 |

| | | | |
|----------|---|----------|----------|
| *356 714 | Medical Science Research Methodology | 3(2-3-6) | 3(2-3-6) |
|----------|---|----------|----------|

| | | | |
|----------|--|----------|----------|
| *359 991 | Seminar in Advanced Tropical Medicine I | 1(1-0-2) | 1(1-0-2) |
|----------|--|----------|----------|

| | | | |
|---------|-----------------|---|---|
| XXX XXX | Elective course | - | 6 |
|---------|-----------------|---|---|

| | | | |
|----------|--------------------------|----|----|
| *359 999 | Dissertation | 5 | - |
| | Total Credits registered | 9 | 10 |
| | Sum of the credits | 18 | 19 |

| Course | Year 2,First semester | Credit | |
|----------|---|----------|----------|
| Code | Course Name | Type 2.1 | Type 2.2 |
| *359 992 | Seminar in Advanced Tropical Medicine II | 1(1-0-2) | 1(1-0-2) |
| *359 998 | Dissertation | - | 9 |
| *359 999 | Dissertation | 8 | - |
| | Total Credits registered | 9 | 10 |
| | Sum of the credits | 27 | 32 |

| Course | Year 2,second semester | Credit | |
|----------|--|----------|----------|
| Code | Course Name | Type 2.1 | Type 2.2 |
| *359 993 | Seminar in Advanced Tropical Medicine III | 1(1-0-2) | 1(1-0-2) |
| *359 998 | Dissertation | - | 9 |
| *359 999 | Dissertation | 8 | - |
| | Total Credits registered | 9 | 10 |
| | Sum of the credits | 36 | 42 |

| Course | Year 3,First semester | Credit | |
|----------|--------------------------|----------|----------|
| Code | Course Name | Type 2.1 | Type 2.1 |
| *359 998 | Dissertation | - | 9 |
| *359 999 | Dissertation | 9 | - |
| | Total Credits registered | 9 | 9 |

| | | |
|--------------------|----|----|
| Sum of the credits | 45 | 51 |
|--------------------|----|----|

| Course | Year 3,Second semester | Credit | |
|----------|--------------------------|----------|----------|
| Code | Course Name | Type 2.1 | Type 2.1 |
| *359 998 | Dissertation | - | 9 |
| *359 999 | Dissertation | 3 | - |
| | Total Credits registered | 3 | 9 |
| | Sum of the credits | 48 | 60 |

| Course | Year 4,First semester | Credit | |
|----------|--------------------------|----------|----------|
| Code | Course Name | Type 2.1 | Type 2.1 |
| *359 998 | Dissertation | - | 9 |
| | Total Credits registered | - | 9 |
| | Sum of the credits | - | 69 |

| Course | Year 4,Second semester | Credit | |
|----------|--------------------------|----------|----------|
| Code | Course Name | Type 2.1 | Type 2.1 |
| *359 998 | Dissertation | - | 3 |
| | Total Credits registered | - | 3 |
| | Sum of the credits | - | 72 |