

**Master of Science**  
**Program in Tropical Medicine International Program**  
**(Updated version, 2013)**

1. **Degree Program** : Master of Science Program in Tropical Medicine  
(International Program)

2. **Degree Offered** : Master of Science (Tropical Medicine)  
M.Sc. (Tropical Medicine)

**3. Responsible Department/Faculty**

Faculty of Medicine, Khon Kaen University.

Graduate School, Khon kaen University.

4. **Objectives** :

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

(1) An understanding deeply in the fields of Medical Biochemistry and Molecular Biology for applying new 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 A 1 Program not less than 36 Credits

Total Credit hours for Type A 2 Program not less than 36 Credits

## 5.2 Program Structures

|                       | Number Credits  |          |
|-----------------------|-----------------|----------|
|                       | Type A 1        | Type A 2 |
| 1) Compulsory courses | 2 (non credits) | 8        |
| 2) Elective courses   | -               | 16       |
| 3) Dissertation       | 36              | 12       |
| Total                 | 36              | 36       |

## 6. Courses

### 6.1 Compulsory courses:

#### Type 1.1 Program (Non Credits)

|          |                                 |          |
|----------|---------------------------------|----------|
| *359 891 | Seminar in Tropical Medicine I  | 1(1-0-2) |
| *359 892 | Seminar in Tropical Medicine II | 1(1-0-2) |

#### Type 1.2 Program

|          |                                      |          |
|----------|--------------------------------------|----------|
| *359 701 | Tropical Medicine                    | 3(3-0-6) |
| *356 714 | Medical Science Research Methodology | 3(2-3-6) |
| *359 891 | Seminar in Tropical Medicine I       | 1(1-0-2) |
| *359 892 | Seminar in Tropical Medicine II      | 1(1-0-2) |

### 6.2 Elective courses :

**Type 1.1 Program :** None

**Type 1.2 Program :** Not less than 16 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) |
| 356 713  | Laboratory Techniques in Medical Sciences | 2(0-6-3) |
| *359 710 | Advanced Tropical Medicine                | 1(1-0-2) |
| *359 711 | Tropical Disease Control                  | 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) |
| 363 715  | Biochemistry and Molecular Biology of Cancer                            | 2(2-0-4) |
| 363 718  | 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) |
| *366 743 | Principle of Medicinal Plant Development and<br>Pharmacological Testing | 3(2-3-5) |
| *366 744 | Natural Products in Medicine  | 2(2-0-4) |
| *366 745 | Clinical Pharmacology in Tropical Medicine I                            | 3(3-0-6) |
| 374 745  | Community Epidemiology  | 2(1-3-4) |
| *379 794 | Clinical Tropical Infectious Diseases                                   | 3(3-0-6) |
| 381 703  | Health Systems Management   | 3(3-0-6) |

### 6.3 Dissertation

Type 1.1 Program :

|          |        |            |
|----------|--------|------------|
| *359 898 | Thesis | 36 Credits |
|----------|--------|------------|

Type 1. 2 Program :

|          |        |            |
|----------|--------|------------|
| *359 899 | Thesis | 12 Credits |
|----------|--------|------------|

## 7. Class Schedule

### Plan for Type A 1

| Course   | Year 1,First semester    | Credits  |
|----------|--------------------------|----------|
| Code     | Course Name              | Type A 1 |
| *359 898 | Thesis                   | 9        |
|          | Total Credits registered | 9        |
|          | Sum of the credits       | 9        |
| Course   | Year 1 ,Second semester  | Credits  |

| Code     | Course Name                    | Type A 1 |
|----------|--------------------------------|----------|
| *359 891 | Seminar in Tropical Medicine I | 1(1-0-2) |
| *359 898 | Thesis                         | 9        |
|          | Total Credits registered       | 9        |
|          | Sum of the credits             | 18       |

| Course   | Year 1,Second semester          | Credits  |
|----------|---------------------------------|----------|
| Code     | Course Name                     | Type A 1 |
| *359 892 | Seminar in Tropical Medicine II | 1(1-0-2) |
| *359 898 | Thesis                          | 9        |
|          | Total Credits registered        | 9        |
|          | Sum of the credits              | 27       |

| Course   | Year 2,Second semester   | Credits  |
|----------|--------------------------|----------|
| Code     | Course Name              | Type A 1 |
| *359 898 | Thesis                   | 9        |
|          | Total Credits registered | 9        |
|          | Sum of the credits       | 36       |

#### Plan for Type A 2

| Course   | Year 1,First semester    | Credits  |
|----------|--------------------------|----------|
| Code     | Course Name              | Type A 2 |
| *359 701 | Tropical Medicine        | 3(3-0-6) |
| XXX XXX  | Elective course          | 8        |
|          | Total Credits registered | 11       |
|          | Sum of the credits       | 11       |

| Course   | Year 1,Second semester   | Credits  |
|----------|--------------------------|----------|
| Code     | Course Name              | Type A 2 |
| *356 714 | Medical Science Research | 3(2-3-6) |

|          |                                |          |
|----------|--------------------------------|----------|
|          | Methodology                    |          |
| *359 891 | Seminar in Tropical Medicine I | 1(1-0-2) |
| XXX XXX  | Elective course                | 8        |
|          | Total Credits registered       | 12       |
|          | Sum of the credits             | 23       |

| Course   | Year 2,First semester           | Credits  |
|----------|---------------------------------|----------|
| Code     | Course Name                     | Type A 2 |
| *359 892 | Seminar in Tropical Medicine II | 1(1-0-2) |
| *359 899 | Thesis                          | 8        |
|          | Total Credits registered        | 9        |
|          | Sum of the credits              | 32       |

| Course   | Year 2,second semester   | Credits  |
|----------|--------------------------|----------|
| Code     | Course Name              | Type A 2 |
| *359 899 | Thesis                   | 4        |
|          | Total Credits registered | 4        |
|          | Sum of the credits       | 36       |