Overview

The MS in Tropical Medicine is an academic degree designed to build a strong knowledge of infectious diseases of global public health importance. Coursework provides a solid foundation in parasitology, vector biology and other infectious diseases. Specialty courses in biological, cellular and epidemiological aspects of pathogens and infectious disease comprise the curriculum. Students are required to carry out original research and write a thesis based on the findings of the research project.

Graduates of the MS degree in Tropical Medicine are expected to find careers in public health, biomedical sciences, or related fields at academic institutions, governmental and non-governmental organizations, health care organizations, or biotechnology/pharmaceutical companies. Many individuals enter the program with the intention of subsequently pursuing doctoral or medical degrees.

Program Competencies (https://sph.tulane.edu/trmd/msph/)

The following competencies are necessary for success in the particular branch of public health to which this degree relates. They were developed through rigorous analysis of employers, community and global needs, and the quality standards set forth by accrediting bodies.

1. Explain infectious disease including types of organisms, mechanisms or transmission, and natural history.
2. Demonstrate knowledge of the biology and immunology of host-pathogen interactions and their outcomes.
3. Effectively communicate research-based peer-reviewed literature.
4. Analyze how research projects address specific questions as applied to tropical medicine.
5. Identify appropriate statistical analyses and research methodology for performing hypothesis-driven research that address public health problems.
6. Appraise the strengths and weaknesses of biomedical methods used in public health.

Requirements

The MS degree requires a total of 42 credits that includes:

Required Courses

<table>
<thead>
<tr>
<th>Course ID</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPHL 6020</td>
<td>Foundations in Public Health</td>
<td>3</td>
</tr>
<tr>
<td>SPHL 6050</td>
<td>Biostatistics for Public Health</td>
<td>3</td>
</tr>
<tr>
<td>SPHL 6060</td>
<td>Epidemiology for Public Health</td>
<td>3</td>
</tr>
<tr>
<td>TRMD 6050</td>
<td>Medical Helminthology</td>
<td>3</td>
</tr>
<tr>
<td>TRMD 6060</td>
<td>Medical Entomology</td>
<td>3</td>
</tr>
<tr>
<td>TRMD 6070</td>
<td>Medical Protozoology and Malaria</td>
<td>3</td>
</tr>
<tr>
<td>TRMD 6170</td>
<td>Immunology</td>
<td>3</td>
</tr>
<tr>
<td>TRMD 6250</td>
<td>Biomedical Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>TRMD 6420</td>
<td>Tropical Virology</td>
<td>3</td>
</tr>
<tr>
<td>TRMD 6330</td>
<td>Microbial Disease of the Tropics</td>
<td>3</td>
</tr>
<tr>
<td>TRMD 7020</td>
<td>Infectious Disease Seminar (taken two semesters)</td>
<td>1</td>
</tr>
<tr>
<td>TRMD 9980</td>
<td>Master’s Thesis Research</td>
<td>0</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td></td>
<td>42</td>
</tr>
</tbody>
</table>

Thesis

Students pursuing the MS degree in Tropical Medicine must successfully complete a thesis based on a rigorous and independent research project demonstrating scholarship in Tropical Medicine research. The project will be supervised by a thesis director who is a faculty member of the Department of Tropical Medicine.

Students who have completed required coursework may register in TRMD 9980 (Thesis Research) each semester while conducting the research and writing the thesis. The master’s thesis should be completed within a year of completion of the required courses.
# Model Course Schedule

## Year 1

### Fall
- **SPHL 6020**: Foundations in Public Health 3
- **SPHL 6050**: Biostatistics for Public Health 3
- **TRMD 6170**: Immunology 3
- **TRMD 6050**: Medical Helminthology 3
- **TRMD 6330**: Microbial Disease of the Tropics 3

### Credit Hours
15

### Spring
- **TRMD 6060**: Medical Entomology 3
- **TRMD 6070**: Medical Protozoology and Malaria 3
- **TRMD 6250**: Biomedical Research Methods 3
- **TRMD 7020**: Infectious Disease Seminar 1
- **SPHL 6060**: Epidemiology for Public Health 3

### Credit Hours
13

### Summer Session
- **TRMD 9980**: Master’s Thesis Research 0

### Credit Hours
0

## Year 2

### Fall
- **TRMD 7020**: Infectious Disease Seminar 1
- **Electives**: 5
- **TRMD 9980**: Master’s Thesis Research 0
- **TRMD 6420**: Tropical Virology 3

### Credit Hours
9

### Spring
- **TRMD 9980**: Master’s Thesis Research 0
- **Electives**: 5

### Credit Hours
5

### Total Credit Hours
42