

# Infectious Diseases & Microbiology

## PhD Course Plan

*(based on 2021 IDM Handbook)*

**Please note:** PhD students must take 15 credits each fall and spring semester and 6 credits each summer of their first two years to meet the 72 credit requirement to reach Full-time Dissertation Research (FTDR) status.

### FIRST YEAR

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**Fall Term** *(Students cannot take more than 15 credits in any semester)*

| <b>Course Number</b> | <b>Course Name</b>                               | <b>Credits</b>  |
|----------------------|--|-----------------|
| EPIDEM 2110          | Principles of Epidemiology                       | 3               |
| IDM 2001             | Molecular Biology of Microbial Pathogens         | 3               |
| IDM 2003             | Host Response to Microbial Infection             | 2               |
| IDM 2019+            | The Emergence and Global Spread of COVID-19      | 2               |
| IDM 2021             | Special Studies in Microbiology (Lab Rotation I) | 2               |
| IDM 2023             | Microbiology Laboratory                          | 2               |
| IDM 2025             | Microbiology Seminar                             | 1               |
| <br>                 |  |                 |
| PUBHLT 2022          | Public Health Grand Rounds                       | 0               |
|                      |  | <b>TOTAL 15</b> |

+ Course is a requirement only for first-year students entering Fall 2020.

**Spring Term**

| <b>Course Number</b> | <b>Course Name</b>                                | <b>Credits</b>  |
|----------------------|---|-----------------|
| EPIDEM 2161          | Methods of Infectious Disease Epidemiology        | 1               |
| IDM 2002             | Molecular Virology                                | 2               |
| IDM 2021             | Special Studies in Microbiology (Lab Rotation II) | 7               |
| IDM 2025             | Microbiology Seminar                              | 1               |
| <br>                 |   |                 |
| PUBHLT 2011          | Essentials of Public Health                       | 3               |
| PUBHLT 2022          | Public Health Grand Rounds                        | 0               |
| IDM 2041             | Scientific Communication & Research Ethics        | 1               |
|                      |   | <b>TOTAL 15</b> |

**Summer Term** *(Students cannot take more than 6 credits during the summer term)*

| <b>Course Number</b> | <b>Course Name</b>  | <b>Credits</b> |
|----------------------|---|----------------|
| IDM 2021             | Special Studies in Microbiology (Lab Rotation III/Research) | 6              |
|                      |   | <b>TOTAL 6</b> |

### DOCTORAL PRELIMINARY EXAMINATION IN JUNE

Student chooses advisor after completion of 2-3 laboratory rotations.

### SECOND YEAR

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**Fall Term**

| <b>Course Number</b> | <b>Course Name</b>                         | <b>Credits</b>  |
|----------------------|--|-----------------|
| BIOST 2041           | Introduction to Statistical Methods I      | 3               |
| IDM 2004             | Viral Pathogenesis                         | 2               |
| IDM 2021             | Special Studies in Microbiology (Research) | 3               |
| IDM 2025             | Microbiology Seminar                       | 1               |
| Elective(s)          | See list of recommended electives          | <u>4-6</u>      |
|                      |  | <b>TOTAL 15</b> |

**Spring Term**

| <b>Course Number</b> | <b>Course Name</b>                         | <b>Credits</b> |
|----------------------|--|----------------|
| IDM 2014             | Functional Genomics of Microbial Pathogens | 3              |
| IDM 2021             | Special Studies in Microbiology (Research) | 6              |
| IDM 2025             | Microbiology Seminar                       | 1              |
| Elective(s)          | See list of recommended electives          | <u>1 - 5</u>   |
|                      |  | TOTAL 15       |

**Summer Term**

| <b>Course Number</b> | <b>Course Name</b>                         | <b>Credits</b> |
|----------------------|--|----------------|
| IDM 2021             | Special Studies in Microbiology (Research) | 3 - 6          |
| Elective(s)          | See list of recommended electives          | <u>1 - 3</u>   |
|                      |  | TOTAL 6        |

**DOCTORAL COMPREHENSIVE EXAMINATION IN JULY****THIRD, FOURTH, & FIFTH YEARS**

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**Fall Term**

| <b>Course Number</b> | <b>Course Name</b>           | <b>Credits</b> |
|----------------------|------------------------------|----------------|
| FTDR 3999            | Full-time dissertation study | 0              |

**Spring Term**

| <b>Course Number</b> | <b>Course Name</b>           | <b>Credits</b> |
|----------------------|------------------------------|----------------|
| FTDR 3999            | Full-time dissertation study | 0              |

**Summer Term**

| <b>Course Number</b> | <b>Course Name</b>           | <b>Credits</b> |
|----------------------|------------------------------|----------------|
| FTDR 3999            | Full-time dissertation study | 0              |

**DISSERTATION DEFENSE**

# Infectious Diseases & Microbiology

## MS Course Plan

Note: Full-time MS students cannot register for less than 9 credits until the spring term of their second year. A total of 36 credits are required.

### FIRST YEAR

#### Fall Term

| Course Number | Course Name                                      | Credits  |
|---------------|--|----------|
| EPIDEM 2110   | Principles of Epidemiology                       | 3        |
| IDM 2001      | Molecular Biology of Microbial Pathogens         | 3        |
| IDM 2003      | Host Response to Microbial Infection             | 2        |
| IDM 2019      | The Emergence and Global Spread of COVID-19      | 2        |
| IDM 2021      | Special Studies in Microbiology (Lab Rotation I) | 3        |
| IDM 2023      | Microbiology Laboratory                          | 1        |
| IDM 2025      | Microbiology Seminar                             | 1        |
| PUBHLT 2022   | Public Health Grand Rounds                       | 0        |
|               |  | TOTAL 15 |

#### Spring Term

| Course Number | Course Name                                       | Credits  |
|---------------|---|----------|
| IDM 2161      | Methods of Infectious Disease Epidemiology        | 1        |
| IDM 2002      | Molecular Virology                                | 3        |
| IDM 2021      | Special Studies in Microbiology (Lab Rotation II) | 3        |
| IDM 2025      | Microbiology Seminar                              | 1        |
| IDM 2040      | Scientific Communication and Research Ethics      | 1        |
| PUBHLT 2011   | Essentials of Public Health                       | 3        |
| PUBHLT 2022   | Public Health Grand Rounds                        | 0        |
| Elective(s)   | See list of recommended electives                 | 3        |
|               |   | TOTAL 15 |

#### STUDENT CHOOSES LAB/ADVISOR IF ROTATED

#### Summer Term

| Course Number | Course Name                                       | Credits |
|---------------|---|---------|
| IDM 2021      | Special Studies in Microbiology (Thesis Research) | 0       |
|               |   | TOTAL 0 |

#### MASTER'S COMPREHENSIVE EXAMINATION (TYPICALLY AT MAY'S END)

### SECOND YEAR

#### Fall Term

| Course Number | Course Name                                       | Credits     |
|---------------|---|-------------|
| IDM 2021      | Special Studies in Microbiology (Thesis Research) | 4           |
| IDM 2025      | Microbiology Seminar                              | 1           |
| BIOST 2041    | Introduction to Statistical Methods I             | 3           |
| IDM 2004      | Viral Pathogenesis                                | 2           |
| Elective(s)   | See list of recommended electives                 | 2-5         |
|               |   | TOTAL 12-15 |

#### Spring Term

| Course Number | Course Name                                       | Credits     |
|---------------|---|-------------|
| IDM 2021      | Special Studies in Microbiology (Thesis Research) | 8           |
| IDM 2025      | Microbiology Seminar                              | 1           |
| Elective(s)   | See list of recommended electives                 | 2-6         |
|               |   | TOTAL 11-15 |

# Infectious Diseases & Microbiology

## MPH-MIC Course Plan

Note: Full-time MPH students cannot register for less than 9 credits until spring term of their second year. A total of 42 credits are required.

### FIRST YEAR

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#### Fall Term

| <b>Course Number</b> | <b>Course Name</b>                          | <b>Credits</b> |
|----------------------|---|----------------|
| BIOST 2041           | Introduction to Statistical Methods I       | 3              |
| EPIDEM 2110          | Principles of Epidemiology                  | 3              |
| IDM 2019             | The Emergence and Global Spread of COVID-19 | 2              |
| IDM 2034             | Prevention and Control of HIV/AIDS          | 2              |
| PUBHLT 2015          | Public Health Biology                       | 2              |
| PUBHLT 2022          | Public Health Grand Rounds                  | 0              |
| PUBHLT 2033          | Foundations of Public Health (Online)       | 1              |
| Elective Optional    |   |                |

TOTAL 13-15

#### Spring Term

| <b>Course Number</b> | <b>Course Name</b>   | <b>Credits</b> |
|----------------------|--|----------------|
| BCHS 2509            | Social & Behavioral Sciences and Public Health                   | 3              |
| EOH 2013             | Environmental Health & Disease                                   | 2              |
| IDM 2038             | Prevention, Treatment, and Control of Global Infectious Diseases | 3              |
| IDM 2025             | MPH Seminar  | 1              |
| IDM 2069             | Infection Prevention and Control in Healthcare Settings          | 2              |
| PUBHLT 2022          | Public Health Grand Rounds                                       | 0              |
| PUBHLT 2034          | Public Health Communications                                     | 2              |
| Elective             | Elective opportunity/Certificate class                           | <u>1-2</u>     |

TOTAL 14-15

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### SECOND YEAR

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#### Fall Term

| <b>Course Number</b> | <b>Course Name</b>   | <b>Credits</b> |
|----------------------|--|----------------|
| IDM 2021             | Special Studies (Thesis/Essay)                                   | 3              |
| IDM 2032             | Human Diversity & Public Health                                  | 2              |
| IDM 2068             | Infection Prevention Internship                                  | 3              |
|                      | Or   |                |
| IDM 2007             | Practicum  |                |
| PUBHLT 2035          | Applications in Public Health                                    | 2              |
| HPM 2001             | Introduction to Leadership, Management & Policy in Public Health | 3              |
| Elective             | Elective   | <u>2</u>       |

TOTAL 15

#### Spring Term

| <b>Course Number</b> | <b>Course Name</b>             | <b>Credits</b> |
|----------------------|--------------------------------|----------------|
| IDM 2021             | Special Studies (Thesis/Essay) | 1              |
| Elective             | Elective optional              | <u>1-3</u>     |

TOTAL 1-4

# Infectious Diseases & Microbiology

## MPH-PEL Course Plan

Full-time MPH students cannot register for less than 9 credits until spring term of their second year. A total of 42 credits are required.

### FIRST YEAR

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#### Fall Term

| Course Number | Course Name                                 | Credits |
|---------------|---|---------|
| BIOST 2041    | Introduction to Statistical Methods I       | 3       |
| EPIDEM 2110   | Principles of Epidemiology                  | 3       |
| IDM 2010      | Pathogen Biology                            | 2       |
| IDM 2019      | The Global Emergence and Spread of COVID-19 | 2       |
| PUBHLT 2022   | Public Health Grand Rounds                  | 0       |
| PUBHLT 2033   | Foundations of Public Health (Online)       | 1       |
| Elective      | Elective opportunity/Certificate class      | 1-4     |

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TOTAL 11-15

#### Spring Term

| Course Number | Course Name   | Credits |
|---------------|---|---------|
| BCHS 2509     | Social & Behavioral Sciences and Public Health                      | 3       |
| EOH 2013      | Environmental Health and Disease                                    | 2       |
| HPM 2001      | Introduction to Leadership, Management and Policy for Public Health | 3       |
| IDM 2025      | MPH Seminar   | 1       |
| PUBHLT 2022   | Public Health Grand Rounds  | 0       |
| Elective      | Elective opportunity/Certificate class                              | 1-5     |

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TOTAL 10-15

### SECOND YEAR

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#### Fall Term

| Course Number | Course Name                                  | Credits |
|---------------|--|---------|
| IDM 2003      | Host Response to Microbial Infections        | 2       |
| IDM 2007*     | Public Health Communicable Disease Practicum | 3       |
| IDM 2021      | Special Studies (Thesis/Essay)               | 2-4     |
| IDM 2025      | MPH Seminar                                  | 1       |
| PUBHLT 2034   | Public Health Communications                 | 2       |
| Elective      | Elective opportunity/Certificate class       | 3-7     |

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TOTAL 13-15

#### Spring Term

| Course Number | Course Name                            | Credits |
|---------------|--|---------|
| IDM 2021      | Special Studies (Thesis/Essay)         | 2-4     |
| PUBHLT 2035   | Applications in Public Health          | 2       |
| Elective      | Elective opportunity/Certificate class | 1-4     |

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TOTAL 5-10