**Medical Immunology**

|  |  |
| --- | --- |
| **School** | [School of Medicine](http://en.tums.ac.ir/en/content/74/school-of-medicine) |
| **Department** | Department of Medical Immunology |
| **Degree** | MSc |

**Total Course Credits**

** Compensatory: 6**

** Core: 20**

** Non-core (Electives): 2**

** Thesis: 7**

**Contents of the Master’s Degree Program**

**Year 1**

**First Semester**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of Credits** | | |  | |
| **Total** | **Practical** | |  |  |  | | --- | --- | --- | | **Theoretical** |  |  | | **Title of the Course** | **Code of the Course** |
| 2 | 1 | 1 | Medical Information Systems | 1167031 |
| 2 | 1 | 1 | Introduction to Laboratory Methods | 1167035 |
| 3 | - | 3 | Basics of Medical Immunology | 1167037 |
| 2 | - | 2 | Molecular Biology & Bioinformatics | 1167042 |
| 2 | - | 2 | Specialized English | 1167034 |
|  |  |  | Quality Control of Immunologic Diagnostic Methods |  |
|  |  |  | Biosafety |  |
|  |  |  | Introduction to Molecular Biology Software |  |
| 11 |  |  |  | Total Credits |

**Second Semester**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of Credits** | | |  | |
| **Total** | **Practical** | |  |  |  | | --- | --- | --- | | **Theoretical** |  |  | | **Title of the Course** | **Code of the Course** |
| 2 | - | 2 | Immunology of Infectious Diseases | 1167038 |
| 2 | - | 2 | Immunopathology | 1167039 |
| 4 | 2 | 2 | Laboratory methods in immunology and immunochemistry | 1167040 |
| 1 | - | 1 | Research Methodology | 1167045 |
| 1 | - | 1 | Reproductive Immunology | 1167062 |
| 1 | 0.5 | 0.5 | Laboratory Animal Science | 1167041 |
|  |  |  | Advanced Scientific Writing Principles and Reviewing Scientific Products |  |
|  |  |  | Understanding Research Ethics: Avoiding Plagiarism and Academic Misconduct |  |
|  |  |  | Introduction to Scientific and Biological Image Design Software |  |
|  |  |  | Entrepreneurship |  |
| 11 |  |  |  | Total Credits |

**Year 2**

**Third Semester**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of Credits** | | |  | |
| **Total** | **Practical** | |  |  |  | | --- | --- | --- | | **Theoretical** |  |  | | **Title of the Course** | **Code of the Course** |
| 2 | 0.5 | 1.5 | Immunohematology and Blood Bank | 1167043 |
| 1 | - | 1 | Vaccination & Immunotherapy | 1167044 |
| 1 | - | 1 | Seminar | 1167046 |
| 1 | 1 | - | Internship in Medical diagnosis laboratory | 1167047 |
| 1 | - | 1 | Immunopharmacology | 1167049 |
| 7 | 7 | - | MSc Thesis | 1167048 |
|  |  |  |  |  |
| 13 |  |  |  | Total Credits |

**Fourth Semester**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Total** | **Practical** | |  |  |  | | --- | --- | --- | | **Theoretical** |  |  | | **Title of the Course** | **Code of the Course** |
| 7 | 7 | - | MSc Thesis | 1167048 |