**Vector Biology and Control of Disease**

**First semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Row** | **Name of course** | **Course code** | **Course type** | **Number of units** | **Course code prerequisite** |
| **Theoretical** | **Practical** | **Total** |
| 1 | Islamic Thought (1) | 1 | General  | 2 | \_ | 2 | \_ |
| 2 | Invertebrate zoology | 07 | Required  | 2 | \_ | 2 | \_ |
| 3 | General English language | 7 | General  | 3 | \_ | 3 | \_ |
| 4 | General chemistry | 01 | Required  | 2 | 1 | 3 | \_ |
| 5 | General biology | 05 | Required  | 2 | \_ | 2 | \_ |
| 6 | Computer  | 10 | Required  | 1 | 1 | 2 | \_ |
| 7 | Principles of health services management | 15 | Required  | 2 | \_ | 2 | \_ |
| 8 | Familiarity with the lab equipment | 11 | Required  | \_ | 1 | 1 | first semester |
| 9 | Education laws |  | General  | 0.5 | \_ | 0.5 | \_ |
| 10 | Life skills |  | General  | 0.5 | \_ | 0.5 | \_ |
| **Total** | 15 | 3 | 18 |  |

**Second semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Row** | **Name of course** | **Course code** | **Course type** | **Number of units** | **Course code prerequisite** |
| **Theoretical** | **Practical** | **Total** |
| 1 | Islamic Thought (2) | 1 | General | 2 | \_ | 2 | \_ |
| 2 | Physical education (1) | 8 | General | \_ | 1 | 1 | \_ |
| 3 | Vertebrate zoology | 08 | Required | 2 | \_ | 2 | \_ |
| 4 | Organic chemistry | 02 | Required | 2 | 1 | 3 | \_ |
| 5 | Statistical methods | 09 | Required | 3 | \_ | 3 | \_ |
| 6 | General ecology | 12 | Required | 2 | \_ | 2 | \_ |
| 7 | Principles of Insects morphology &  | 24 | Specialized | 2 | \_ | 2 | \_ |
| 8 | Insects morphology & physiology lab | 25 | Specialized | \_ | 1 | 1 | 24 |
| 9 |  Persian literature  | 6 | General | 3 | \_ | 3 | \_ |
| **Total**  | 16 | 3 | 19 |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Row** | **Name of course** | **Course code** | **Course type** | **Number of units** | **Course code prerequisite** |
| **Theoretical** | **Practical** | **Total** |
| 1 | Physical education (2) | 9 | General | \_ | 1 | 1 | 8 |
| 2 | Islamic ethics | 2 | General | 2 | \_ | 2 | \_ |
| 3 | Analytical chemistry | 04 | Required | 1 | 1 | 2 | \_ |
| 4 | Medical information systems | 20 | Required | 0.5 | 0.5 | 1 | 10 |
| 5 | Principles of First aid | 21 | Required | 1 | 1 | 2 | \_ |
| 6 | Medical entomology  | 28 | Specialized | 3 | \_ | 3 | 24 |
| 7 | Medical entomology lab | 29 | Specialized | \_ | 1 | 1 | 25,28 |
| 8 | pathobiology | 14 | Required | 2 | 1 | 3 | \_ |
| 9 | Islamic Revolution of Iran | 3 | General | 2 | \_ | 2 | \_ |
| 10 | physiology epidemiology | 13 |  Required | 2 | \_ | 2 | \_ |
| **Total**  | 13.5 | 5.5 | 19 |  |

**Third semester**

**Fourth semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course code prerequisite** | **Number of units** | **Course type** | **Course code** | **Name of course** | **Row** |
| **Total** | **Practical** | **Theoretical** |
| **\_** | 2 | \_ | 2 | General | 4 | History of Islam | 1 |
| \_ | 2 | \_ | 2 | General | 5 | Thematic commentary of the Quran | 2 |
| 02 | 3 | 1 | 2 | Required | 03 | Biochemistry | 3 |
| \_ | 2 | \_ | 2 | Required | 16 | Preliminary research method | 4 |
| 14 | 1 | \_ | 1 | Required | 18 | Geopathology of Iran | 5 |
| 01,02 | 2 | \_ | 2 | Specialized | 6 | General toxicology | 6 |
| \_ | 3 | \_ | 3 | Specialized | 26 | Insects systematic & their role | 7 |
| 26 | 1 | 1 | \_ | Specialized | 27 | Insects systematic & their role lab | 8 |
| 07 | 1 | \_ | 1 | Specialized | 42 | Snail-born diseases & their control methods | 9 |
| 28 | 2 | \_ | 2 | Specialized | 30 | Malariology  | 10 |
| 30,28 | 1 | 1 | \_ | Specialized | 31 | Malariology lab  | 11 |
|  | 19 | 3 | 16 | **Total** |

**Fifth semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course code prerequisite** | **Number of units** | **Course type** | **Course code** | **Name of course** | **Row** |
| **Total** | **Practical** | **Theoretical** |
| \_ | 2 | \_ | 2 | Required | 22 | Health education and communication | 1 |
| 10,18 | 1 | \_ | 1 | Required | 19 | Application of Geographic information systems(GIS) in health | 2 |
| \_ | 2 | \_ | 2 | General | 10 | Population & Family planning | 3 |
| \_ | 2 | \_ | 2 | General | 11 | History of Islamic culture & civilization | 4 |
| \_ | 2 | 1 | 1 | Specialized | 37 | Principles of insects collection & maintenance  | 5 |
| \_ | 3 | 1 | 2 | Specialized | 34 | Medically important rodents & their control | 6 |
| 7 | 2 | \_ | 2 | Specialized | 23 | Technical language | 7 |
| \_ | 2 | \_ | 2 | Specialized | 46 | Principles of environmental health | 8 |
| \_ | 1 | \_ | 1 | Specialized | 47 | Environmental laws & regulations | 9 |
| 45 | 1 | \_ | 1 | Specialized | 48 | Safety of chemicals | 10 |
|  | 19 | 2 | 17 | **Total** |

**Sixth semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course code prerequisite** | **Number of units** | **Course type** | **Course code** | **Name of course** | **Row** |
| **Total** | **Practical** | **Theoretical** |
| \_ | 1 | \_ | 1 | Required | 17 | Emerging & re-emerging diseases | 1 |
| \_ | 2 | \_ | 2 | Required | 06 | Principles of Genetic | 2 |
| \_ | 3 | 1 | 2 | Specialized | 43 | Pesticides & their application | 3 |
| \_ | 1 | \_ | 1 | Specialized | 40 | Beneficial insects | 4 |
| 08 | 1 | \_ | 1 | Specialized | 38 | Identification &control of venomous vertebrate animals | 5 |
| 24 | 2 | \_ | 2 | Specialized | 36 | Behavior of arthropods | 6 |
| 28 | 1 | \_ | 1 | Specialized | 32 | Leishmaniasis | 7 |
| 28,32 | 1 | 1 | \_ | Specialized | 33 | Leishmaniasis lab | 8 |
| \_ | 1 | \_ | 1 | Specialized | 41 | Principles of operational planning for vector-borne disease control in emergency situation | 9 |
| \_ | 1 | \_ | 1 | Specialized | 39 | Urban pests | 10 |
| 28 | 2 | \_ | 2 | Specialized | 44 | Principles for the control of arthropods | 11 |
|  | 16 | 2 | 14 | **Total** |

**Seventh semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course code prerequisite** | **Number of units** | **Course type** | **Course code** | **Name of course** | **Row** |
| **Total** | **Practical** | **Theoretical** |
| \_ | 3 | 1 | 2 | Specialized | 35 | Acarology  | 1 |
| 43,44 | 1 | \_ | 1 | Specialized | 49 | Environmental management for arthropods control | 2 |
| Last… | 1 | 1 | \_ | Specialized | 50 | project | 3 |
| Last… | 1 | 1 | \_ | Specialized | 51 | seminar | 4 |
| \_ | 8 | 8 | \_ | \_ | 52 | Internship 1 | 5 |
|  | 14 | 11 | 3 | **Total** |

**Eighth semester**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Course code prerequisite** | **Number of units** | **Course type** | **Course code** | **Name of course** | **Row** |
| **Total** | **Practical** | **Theoretical** |
| **\_** | 8 | 8 | **\_** | \_ | 53 | Internship 2  | **1** |
|  | 8 | 8 | \_ | **Total** |