



MADURAI KAMARAJ UNIVERSITY



ONLINE BASIC COURSE ON 1) INFECTIOUS DISEASES 2) VIROLOGY AND 3) EPIDEMIOLOGY (THREE WEEK COURSES) - 2020-2021.

**NODAL OFFICER: DR. K. BALAKRISHNAN
(Dean Faculty of Science)**

Madurai Kamaraj University is offering three week online basic Courses on 1) Infectious Disease, 2) Virology and 3) Epidemiology Online applications are invited from interested candidates and common public who wish to learn fundamentals about infectious diseases, epidemiology of pandemics and virology. These basic courses aimed to create knowledge and awareness about pandemics and inculcate public health and personal hygiene related to infectious diseases.

Mode of Teaching: Online by Google Meet (Schedule of classes will be intimated later to the registered candidates)

Eligibility: Any college student (UG/PG in Arts, Engineering, Medicine, Law etc.,) and any working professional or general public who have completed 12th standard (Science Stream) and above are eligible for enrollment.

Medium of Instructions: English

Course Fee: Rs. 500/- (to be paid online to MKU Registrar Account through SBI-Collect).

Online Payment Link :

<https://www.onlinesbi.com/sbicollect/icollecthome.htm?corpID=166247>

Total No. of students: 100 only (first come first served basis).

Tentative date of commencement of the course: 15.06.2020.

Duration: 3 weeks.

Faculty: Lectures will be delivered by Faculty members from Departments of Immunology, Plant Molecular Biology & Plant Science, Molecular Microbiology, School of Biology and Departments of Genetic Engineering, School of Biotechnology, Madurai Kamaraj University, Madurai. Few lectures will be delivered by foreign faculty members. Recorded lectures will also available in MKU website.

Mode of Exam: An online exam with 100 MCQs for each paper will be conducted at the end of the third week.

Certificate: e-certificate will be provided to all who completed the course.

For further details, contact:

- | | | |
|------------------------|---|--|
| 1) INFECTIOUS DISEASES | : | DR. K. BALAKRISHNAN (Co-ordinator),
Cell No: 9842114117,
Email: immunobala@mkuniversity.org |
| 2) EPIDEMIOLOGY | : | DR. H. SHAKILA (Co-ordinator),
Cell No:9444203771 ,
Email: mohanshakila@yahoo.com |
| 3) VIROLOGY | : | DR. P. GOPAL (Co-ordinator),
Cell No: 9659602819,
Email: pgp79@yahoo.com |



MADURAI KAMARAJ UNIVERSITY



ONLINE BASIC COURSE/ MODULE ON:

- 1) INFECTIOUS DISEASES, 2) EPIDEMIOLOGY AND 3) VIROLOGY
(THREE WEEK COURSES)

Topics To be Covered in Each Module

Course/Module-1: Infectious Diseases

1. Pathogens –Types and classifications.
2. Diagnosis of Infectious Pathogens: Serological Methods.
3. Diagnosis of Infectious Pathogens: Molecular Methods.
4. Typhoid, Syphilis & Gonorrhoea.
5. Dengue, Chikungunya, Ebola & Zika.
6. Malaria, Filariasis & Leishmaniasis.
7. Tuberculosis & Leprosy.
8. HPV, HCV, HBV & AIDS.
9. Influenza, SARS, MERS & Covid-19.
10. Vaccines.

Course/Module 2: Epidemiology

1. Basic concepts and Principles of Epidemiology.
2. Types of Epidemiological Studies.
3. Epidemiology and Public Health.
4. Observational and Experimental epidemiology.
5. Epidemiology and Prevention of Noncommunicable Diseases.
6. Epidemiology and Prevention of Communicable Diseases.
7. Environmental and Occupational Epidemiology.
8. Epidemiology, Health Policy and Planning.
9. Health Data Analysis and Interpretation.
10. Genetic Epidemiology.

Course/Module 3: Virology

1. Introduction to Viruses
2. Symptoms of the Animal & Plant Viral Diseases.
3. Transmissions of Animal and Plant Viruses.
4. Life Cycle of ssDNA Viruses: Gemini Viruses and Nano Viruses.
5. Life Cycle of dsDNA Viruses: Para retro Virus & Herpes Simplex Virus.
6. Life Cycle of ssRNA Viruses (+ and – strand).
7. Life Cycle of dsRNA Viruses and Expression strategies.
8. Suppression of RNA silencing.
9. Diagnostics: Nucleic Acid Based Methods.
10. Plant Viruses – Pathogen Derived Resistance.

* Date of coverage of the above topics by the Faculty Members/Foreign Experts will be intimated to the Registered Candidates.