FOUNDATIONS OF IMMUNOLOGY: ESSENTIAL CONCEPTS AND APPLICATIONS

An Integrated Online Module Series

Offered by the
Institute of Biochemistry, Molecular Biology & Biotechnology (IBMBB)
University of Colombo

Programme Information Last Updated: June 2026

Course Coordinator: Dr. Visula Abeysuriya

Understanding Our Online Self-Paced Courses

Our courses are designed to fit your schedule. "Self-paced" means you learn at your own speed, on your own time. There are no fixed class times or live lectures. You can access course materials 24/7 and progress through modules whenever it suits you.

About the Program

Master the fundamentals of immunology through **8 structured self-paced modules**, each designed to build strong theoretical and practical understanding.
Ideal for **undergraduates, postgraduates, medical students, laboratory trainees, and healthcare professionals**.

MODULE OUTLINE (8 MODULES)

You may update titles as needed — these match the teaching materials you provided.

Module 1 — Introduction to Immunology

Basic terminology, immune organs, immune system overview.

Module 2 — Cells and Organs of the Immune System

Lymphoid organs, immune cell functions, signalling pathways.

Module 3 — Antigen–Antibody Interactions

Epitope recognition, affinity, diagnostic applications (ELISA, RDTs).

Module 4 — Cell Adhesion Molecules (CAMs)

Selectins, integrins, Ig-superfamily, cadherins, immune cell migration.

Module 5 — Major Histocompatibility Complex (MHC I & II)

Antigen presentation, CD4/CD8 pathways, HLA relevance.

Module 6 — Hypersensitivity Reactions (Types I–IV)

Mechanisms, mediators, clinical examples (allergy, autoimmunity).

Module 7 — Complement System Pathways

Classical, lectin, alternative pathways; MAC, C3 convertase.

Module 8 — Cytokines & Chemokines

Cytokine families, immune regulation, cytokine storms, chemotaxis.

Timeline

- The course is conducted in 4-month batches, with the first month reserved for registration.
- Once registered, you may begin the course at any time and complete it at your own pace within the batch period.
- **Current Batch (Batch 2): June – October, Registration is open in June, and all learners must complete the course by 31st October, regardless of their registration date.**
- If you are unable to complete the course within the allocated 4-month course period, an additional 10-day grace period will be provided to complete all course requirements.

Assessment

- Online MCQ-based assessment
- Comprehensive coverage of all four modules
- **Pass mark: 80%**
- Only 3 attempts allowed
- Time-limited assessment

Certification

Digital certificates validated and issued every 4 months.

Certificates will be released after the batch end date. Certificates are typically issued approximately 10 days after the course completion deadline.

🎖 **IBMBB Digital Certificate in Vaccinology**
✓ Officially issued by the University of Colombo

Course Fees

Rs. 4,000 (LKR)

How To Apply

Click here (SSP login)

SSP Login Instructions: Enter your email carefully in the SSP login. Course access will only be sent to this email and cannot be changed or transferred to another address later.

Course Registration Guide

Step 1: Click the Registration Link (SSP login)

Step 2: Select Student Login

Step 3: Create Your Account (Register here)

Step 4: Log In

Step 5: Click "Apply for Courses"

Step 6: Choose Your Course
Select Fundamentals in Immunology and Biostatistics Course, then pick the specific courses you want.

Step 7: Make Payment
Complete the payment process. Once confirmed, you're officially enrolled.

Step 8: Check Your Email for LMS Access
Within 1-3 working days, you'll receive an email with your LMS login details and instructions on how to start your course.

Check your spam folder if you don't see it.

Enrollment & Contact

- Course Coordinator: Dr. Visula Abeysuriya
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