

# BC203 Aug 3 General Biochemistry

#### **Instructor**

Ganesh Nagaraju Email: nganesh@iisc.ac.in

## **Teaching Assistant**

Email:

**Department: Biochemistry** 

Course Time: Mon, Wed and Fri 12-1pm

Lecture venue:

Detailed Course Page:

#### **Announcements**

## **Brief description of the course**

This course teaches advanced biochemistry topics that includes Carbohydrates, Lipids, Proteins, DNA and RNA metabolism and also Signaling mechanisms.

## **Prerequisites**

None

## **Syllabus**

Biochemistry of carbohydrates and lipids. Cell membrane: structure and function. Metabolism: glycolysis, citric acid cycle, oxidative phosphorylation, bioenergetics, fatty acid metabolism. Integration and regulation of metabolism, pentose phosphate pathwaysand gluconeogenesis. Photosynthesis. Protein translation and regulation, cellular transport of proteins and protein turnoover. Signal transduction mechanism, cell cycle,

DNA strucrure, replication and repair. Gene regulation in prokaryotes and eukaryotes.

#### Course outcomes

Students gain knowledge in the broad subject areas of Biochemistry that will help them with their research.

## **Grading policy**

The course is taught by 4 instructors and assessment is based on exams, assignments and presentations.

Assignments

Resources