



UB 204 JANUARY 2:00

Introductory Physiology

Instructor

Dr. N Ravi Sundaresan

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Teaching Assistant

none

Email: none

Department: MCBL

Course Time: Tue., Thu

Lecture venue:

Detailed Course Page: <http://www.iisc.ernet.in/ug/UG-Biology.pdf>

Announcements

NONE

Brief description of the course

The course gives the fundamental knowledge about mammalian Physiology

Prerequisites

NONE

Syllabus

Mammalian physiology: Introduction to physiology, internal environment, control of internal environment by feedback systems, renal physiology, body fluids and kidneys, urine formation by the kidneys, cell signalling and endocrine regulation, hormonal regulation of energy metabolism, hormonal regulation of calcium metabolism, hormonal control of reproduction in males and females, pregnancy and lactation. Plant physiology: plant cell structure and cell wall, water uptake, photosynthesis and photorespiration, secondary metabolites, phytochrome and light signaling, hormone signaling in plants, control of flowering, stress physiology

Course outcomes

Learn about mammalian Physiology

Grading policy

50% for Mid-term and 50% for the Final Exam.

Assignments

Resources

1. J. E. Hall, Guyton and Hall Textbook of Medical Physiology, Elsevier, 12th edition, 2011.
2. J. L. Jameson, L. J. De Groot, Endocrinology, Elsevier, 6th Edition, 2010.
3. L. Taiz, E. Zeiger, Plant Physiology, Sinauer Associates, 5th edition, 2010