



Introduction To Professional & Scientific Communication

Biotechnology

Instructor Name: Prof. S. Ganesh

Institute: IIT Kanpur

Department: Others

About Instructor: Prof. S. Ganesh teaches biology, genetics and genomics at IIT Kanpur. His research interests include human molecular genetics and neuroscience. He works on genetic forms of neurodegenerative disorders in humans to understand their genetics and disease mechanisms, and to develop therapeutics. He has been serving on the editorial boards of journals, and offers courses on professional and scientific communication at IIT Kanpur. For more information, visit his groups website:

<http://home.iitk.ac.in/~sganesh/>

Pre Requisites: : Basic level of understanding on concept and methodology in scientific research

Core/Elective: : Core

UG/PG: : Both

Industry Support : This course is meant for professional development, and hence applicable to all R&D related industries and academia

Course Intro: : The objective of this course is to introduce under-graduate and post-graduate students to the different aspects of professional science communication including written communication, oral communication, reading and ethics in communication.

COURSE PLAN

SL.NO	Week	Module Name
1	1	Introduction to Professional Scientific Communication, Discussion of creativity, research ideas and where to find them, Inductive reasoning versus deductive reasoning
2	2	Hypothesis, reasoning and testing the hypothesis, Peer review process, Structure of a scientific report
3	3	Structure of a scientific report - continued, Title, abstract, methods, results and discussion
4	4	Schematic diagrams, figures, tables and flow charts – rationale and usage, Ethics in biomedical research, Different forms of writing: scientific report, proposal, and reviews, Presentations – thumb rules and good practice