## **Compulsory Course**

LS580 - Research Design, Ethics and Scientific Publishing (1 credit)

S No	Faculty	Topics
1	SKJ	Experimental design and interpretation of results
2	SKJ	
3	SS	Model organisms for basic and applied research in life science: Dictyostelium
4	AN	Model organisms for basic and applied research in life science: <i>Arabidopsis</i>
5	KN	Model organisms for basic and applied research in life science: Saccharomyces
6	ACM	Model organisms for basic and applied research in life science: Drosophila
7	PCR	Use of Radioisotopes: Irradiation, Calculation of activity/specific activity; Radiation safety; Disposal of radioactive waste
8	AN	Safety issues and Biosafety regulation related to recombinant DNA research.
9		Ethical issues and regulations for using transgenic plants and
10	AN	genetically modified crops
11	SKJ	Ethical issues related to the use of small and large animals for research.
12	SKJ	Ethical issues related to the use of human - subjects, embryos, tissues, and stem cells - for research.
13	SGN	Literature databases including hands-on assignments on literature search; Citations and indices; journal Impact factor, H-index.
14	SLP	Essentials of effective scientific writing
15	SLP	
16	KN	Ethics in scientific publishing, and awareness of misconduct in publishing.
17	AP	
18	AP	An overview and implications of translational research. Rationale and implications of Intellectual property rights (IPR) and Patenting.
19	AP	
20	SK	Fundamentals of IPR; Basics understanding about Patentability. Innovation & Knowledge management; Translating Ideas to
21	SK	Entrepreneurship and Startups

ACM: Prof. Amal Chandra Mondal; AN: Prof. Ashis Nandi; AP: Prof. Ashwani Pareek; KN: Prof. K. Natarajan; PCR: Prof. Pramod C Rath; SGN: Prof. S. Gourinath, SKJ\*: Dr. Sushil Jha; SLP: Dr. Snehlata Panwar; SS: Prof. Shweta Saran, SK: Prof. Suneel Katariya.