St. Xavier's College

Mumbai

Syllabus

for B.Sc III Semester Course Scientific Communication Skills-Geology

Contents:

Course co-ordinators- Dr. Ashwin Pundalik and Dr. Hrishikesh Samant

Third Semester-

Objective- Developing skill sets for technical presentations, reading and reviewing scientific papers, and presenting the field data. Helping students write well in all courses. Outline of this course is as follows.

1) **Email etiquettes (1 Session)-** Etiquettes of communication by email. Writing formal emails, Do's and Don'ts of email writing.

Techical presentations- (1 session)

Preparation for the presentation- Do's and don'ts, organizing content, technical details. Knowing audience and ambience

Preparing for a conference presentation Preparing and arranging venue of presentation Responding to Audience Questions and Comments Time management.

Preparing for a poster presentation- Format, data organization and common errors.

2) Paper review- (2 sessions)

Reading old as well as recent publications- How to read a research paper

Stating the main point of the paper in a single sentence and listing the major subtopics. Identifying confusing sections of the paper.

Deciding whether each section of the paper has enough detail, evidence, and information. Indicating whether the paper's points follow one another in sequence.

Identification the strengths of the paper.

Art of writing abstract and organizing data- Guidelines for writing a good abstract. Reading skills and comprehension

Learning about the basic structure of a scientific paper

Reviewing publications on technical grounds and how to write a review

3) Presenting field data- (2 sessions)

Writing field diaries and noting field observations.

Basics of presenting data as observation logs- Lithological logs and traverses

Art of taking field photographs and drawing field sketches. Organization of field data in order to prepare a report.

Evaluation

The evaluation involves a test for the presentation skills as well as reading and comprehension skills.

Recommended Reading-

1. Allen, G. and Illingworth, S. (2016) Effective Science Communication: A practical guide to surviving as a scientist, IOP Science, Online ISBN: 978-0-7503-1170-0, Print ISBN: 978-0-7503-1171-7, 153p.
2. Coe, A. L. (Ed.). (2010). Geological field techniques. ISBN: 978-1-444-33062-5 John Wiley & Sons. 224p.
3. Hanganu-Bresch, C. and Flaherty, K. (2020) Effective Scientific Communication: The Other Half of Science. ISBN: 9780190646813, Oxford University Press, 432p.
4. Gregory, J. and Shortland, M. (1991) Communicating Science: A Handbook, Longman Sc & Tech, ISBN-13: 978-0470216965, 186p.