St. Xavier's College (Autonomous)

Mumbai

SYBSc Syllabus for Scientific Communication Skills

4th Semester

(June 2011 onwards)

Course Outcomes:
Appreciate different types of scientific writing
Summarize different types of scientific material in one's own words without plagiarizing it
Critique a research abstract/article
Write a scientific proposal in a given format using a selected problem
Effectively communicate the experiments done in the laboratory with emphasis on methodology and outcomes

1. Understanding plagiarism part 2: Writing in-text citations and bibliography in different styles/format

2. Literature survey using relevant search engines to build a collection of research articles for the chosen area for writing a project proposal. Understanding the basics of any given reference management software.

3. Understanding the parts of a project proposal. Discussing positive & negative aspects of the proposal

4. Writing a project proposal with a revision of the concept of plagiarism

5. Rules for text, figures, graphs, tables. Eg: punctuation, location legends.

6. Session on how to make graphs using excel

7. Writing project report in form of a paper with an abstract/article

8. Preparing a scientific poster and a PPT

Evaluation:
CIA 1–Project proposal – 10M
CIA 2 – Report of the project – 10M
ESE – Poster making and oral presentation of the project – 30M

References
Besley, J. C., & Tanner, A. H. (2011). What science communication scholars think about training scientists to communicate. Science Communication, 33(2), 239-263.
Buzan, T., & Buzan, B. (1993). The Mind Map Book How to Use Radiant Thinking to Maximise Your Brain's Untapped Potential. New York, USA: Plume.
Dawson, M. M., & Overfield, J. A. (2006). Plagiarism: Do students know what it is? Bioscience Education, 8(1), 1-15.
Matthews, J. R., & Matthews, R. W. (2014). Successful Scientific Writing: A Step-By-Step Guide for The Biological and Medical Sciences. Cambridge, UK: Cambridge University Press.
Sollaci, L. B., & Pereira, M. G. (2004). The introduction, methods, results, and discussion (IMRAD) structure: a fifty-year survey. Journal of the Medical Library Association, 92(3), 364.