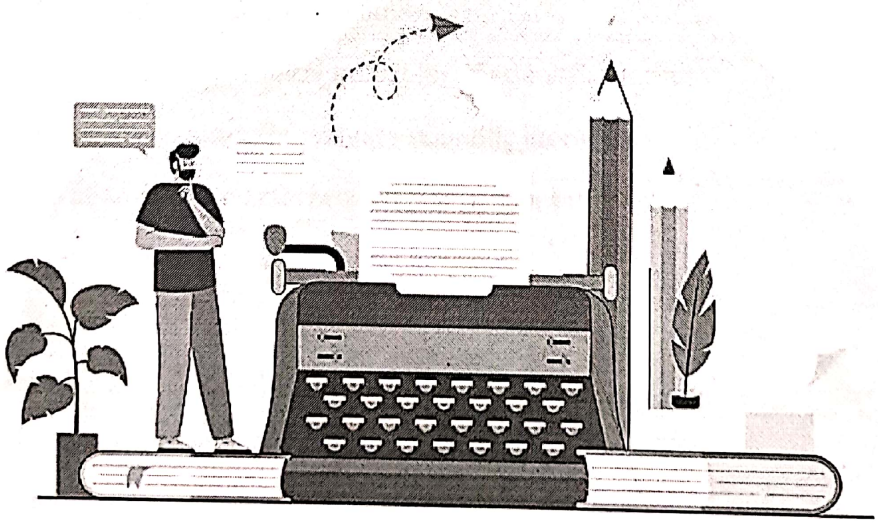
ADD-ON CERTIFICATE COURSE ON SCIENTIFIC RESEARCH PAPER WRITING

DEPARTMENT OF BOTANY
SIR P.T. SCIENCE COLLEGE, MODASA



COURSE TITLE: SCIENTIFIC RESEARCH PAPER WRITING

COURSE DESIGN

COURSE BACKGROUND:

This course is designed to develop students' abilities to write effectively in the scientific community. Students will learn to write clear, concise, and well-organized scientific papers, research proposals, and literature reviews. The course will focus on the elements of good scientific writing, including structure, style, citation, and ethical issues.

REQUIREMENTS:

- Student-participants: Internal. Compulsory for students of B.Sc. Botany (Sem VI
- Teachers: Internal. Faculty members of Department of Botany. External faculty members, research scholars and scientists may be invited to conduct some classes depending on their willingness and availability.
- Course Fee: Nil.
- Intake Capacity:25
- Contact hours: 32 hrs.
- Class/Lecture duration: 1 hr.

OBJECTIVES OF THE COURSE:

1. Upon completion of this course, students should be able to:
2. Understand the principles of scientific writing
3. Develop clear and concise scientific writing skills
4. Use effective scientific citation techniques
5. Understand and apply the ethical principles of scientific writing
6. Develop the ability to critically evaluate scientific literature
7. Develop the ability to give and receive constructive feedback

COURSE OUTLINE:

Week 1: Introduction to Scientific Writing

- Overview of the course
- Principles of scientific writing
- Overview of scientific research

Week 2: Writing Effective Research Proposals

- Structure and format of research proposals
- Developing research questions
- Writing a hypothesis
- Literature review

Week 3: Writing Literature Reviews

- Structure and format of literature reviews
- Conducting a literature review
- Analyzing literature and developing themes

Week 4: Introduction to Scientific Papers

- Structure and format of scientific papers
- Writing a compelling introduction
- Developing a clear methodology
- Results and analysis

Week 5: Communicating Results and Data

- Understanding data presentation
- Developing tables and figures
- Using effective graphic design

Week 6: Scientific Citation and Referencing

- Understanding citation styles
- Citation and plagiarism
- Referencing in scientific writing

Week 7: Ethical Issues in Scientific Writing

- Ethical principles in scientific writing
- Misconduct and fraud in scientific writing
- Peer review and publication ethics

Week 8: Peer Review and Revision

- The peer review process
- Providing constructive feedback

- Responding to feedback

ASSESSMENT:

- Class participation (20%)
- Research proposal (20%)
- Literature review (20%)
- Scientific paper (30%)
- Peer review (10%)

STUDENT FEEDBACK:

- It will be collected via Google Form after completion of the course.