THE ISLAMIA UNIVERSITY OF BAHAWALPUR

DEPARTMENT OF ENTOMOLOGY

COURSE OUTLINE SPRING 2020

Course Tittle: Scientific Writing and Presentation

Course Code: ENT-602

Credit Hours:3(2-1)

Instructor: **DR. SAJJAD ALI**

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DESCRIPTION & OBJECTIVES

To familiarize the students to research methods, handling of experimental data, writing of a research proposals, projects, manuscripts, thesis and project reports and presentation skills. To make the students able to work independently and team for research projects and present their data in the forms mentioned above at conferences and thesis defenses.

READINGS

1. Davis, M. 2005. Scientific Papers and Presentations. Academic Press.
2. Dawson, C. 2009. Introduction to Research Methods: A practical guide for anyone undertaking a research project. 4th edition. Howtobooks, UK.
3. Awan J.A. 2003. Scientific Presentations. Unitech Communications. Faisalabad, Pakistan
4. Knisely, K., 2009. A Student Handbook for Writing in Biology, 4th Edition, Sinauer Associates, Inc. W.H. Freeman and Company.
5. Quinn, G.P. and Michael, J.K. 2002. Experimental Design and Data Analysis for Biology. Cambridge University Press.
6. Matthews, J. R., John, M. B. and Robert, W. M., 1996. Successful Scientific Writing, A Step-By-Step Guide for Biomedical Scientists. Cambridge University Press.

CONTENTS

**THEORY:**

Introduction; literature search for entomological information, citation, collection of data, tabulation, analysis and interpretation of research data, report writing, lab/field experimental designs, concepts of synopsis, thesis, research paper, research project and monographs, presentation skills.

**PRACTICAL:**

Use of internet sources and databases for entomological information; layout of experiments; collection of data, tabulation, analysis and interpretation of research data; Writing synopsis, thesis, research paper, research project and monographs; preparation and delivery of multimedia presentations; visit and use of digital libraries.

TENTATIVE COURSE SCHEDULE

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| Week | Topic and Readings | Books | Dates |
| 1. | Introduction about scientific writing | Scientific Presentations, 1-15 |  |
| 2. | Literature search strategy | A student handbook for  writing in biology, 9-25 |  |
| 3. | Concepts of good scientific writing | Successful Scientific Writing, 53-73 |  |
| 4. | Concepts of literature review | Scientific Presentations, 47-52 |  |
| 5. | Concepts of synopsis and research proposals | Scientific Presentations, 53-59 |  |
| 6. | Concepts of thesis and monographs | Scientific Presentations, 63-80 |  |
| 7. | Writing a research project and reports | Scientific Presentations, 105-110 |  |
| 8. | Concepts of Plagiarism | A student handbook for  writing in biology, 40-45 |  |
| 9. | Revisions + Class Presentations |  |  |
| 10. | **Mid Exam** |  |  |
| 11. | Good presentation skills: Presentations | A student handbook for  writing in biology, 143-163 |  |
| 12. | Good presentation skills: Posters | A student handbook for  writing in biology, 143-163 |  |
| 13. | Collection of data its tabulation | A student handbook for  writing in biology, 203-230 |  |
| 14. | Lab and field experimental designs | Experimental Design and Data Analysis for Biology, 5-12 |  |
| 15. | Handling and analysis of research data | Experimental Design and Data Analysis for Biology, 58-70 & 173-193 |  |
| 16. | Interpretation and presentation of research data | Experimental Design and Data Analysis for Biology, 494-509 |  |
| 17. | Interpretation and presentation of research data | Experimental Design and Data Analysis for Biology, 494-509 |  |
| 18. | Class Presentations of Lab Projects |  |  |
| 19. | Class Presentations of Lab Projects |  |  |
| 20. | **Final Exams** |  |  |

RESEARCH PROJECT

The students will be directed to prepare research proposals under Ent-608. After the completion of their projects, project reports, presentations and posters will be made by them and evaluated. The students will also be encouraged to present scientific papers of other research worker for their writing and presenting skills’ improvement.

ASSESSMENT CRITERIA

Sessional + Assignments: 08

Mid Exam: 12

Final exam: 20

Project + lab performance + Presentations: 08

Practical Written exam: 12

RULES AND REGULATIONS

80% class attendance

Class participation in presentations and discussions