

| Seventh Semester |             |                                          |              |
|------------------|-------------|------------------------------------------|--------------|
| S. No.           | Course Code | Course Title                             | Credit Hours |
|                  |             |                                          | Theory       |
| 1                | ZOOL-4101   | Research Projects and Scientific Writing | 3            |

### **Course Objectives:**

An awareness of the applications of biochemistry in contemporary science. Familiarity with and competence in applying a range of laboratory techniques and instrumentation used to identify, quantify and study biochemical substances. How to generate, analyze, summarize and report biochemical data. And understand the classical and current laboratory methodologies for research.

### **Course Learning Outcomes:**

- Students will be able to generate data using experiments.
- Also, able to design the projects and write review articles.

### **Course Contents:**

Overview of scientific research, nature of scientific inquiry, applications of research in industry, scientific record keeping, project selection and its development, experimental design and investigation, sampling methods and analysis, data processing, results interpretation, Importance of research report, thesis and scientific paper, Report writing and its presentation, consent form, The student in consultation with the supervisor will prepare an extensive review and design a research plan in the area of interest, based on introduction, literature survey, statement of the problem, objectives, methodology, significance and limitations.

### **Recommended Books:**

1. Robert, V.S., *Graduate research: A guide for students in the science*, University of Washington Press, (1998).
2. Veit, R., Clifford, J., *Writing, Reading & Research Clifford*, Bobbs-Merrill Educational Publications, (1985).
3. Leedy, P.D., Ormrod, J.F., *Practical Research: Planning & Design*, Publishers: Merrill, (2009).
4. Fink, A.G., *Conducting Research Literature Reviews: From the Internet to Paper*, Saga Publications, (2004).