



**Course Module**  
**Departement of Animal Science**  
**Faculty of Animal Science**  
**Universitas Brawijaya**

Module Name	Research Methodology and Scientific Writing
Module Level	Undergraduate Program
Code	PEF60005
Subtitle	-
Courses	Research Methodology and Scientific Writing
Semester (s)	4
Person responsible for the module	-
Lecturer	<ol style="list-style-type: none"> <li>1. Prof. Dr. Ir. Trinil Susilawati, MS, IPU, ASEAN Eng.</li> <li>2. Dr. Ir. Bambang Ali Nugroho, DEA, IPM, ASEAN Eng.</li> <li>3. Prof. Dr. Lilik Eka Radiati, MS, IPU</li> <li>4. Prof. Dr. Budi Hartono, MS, IPU, ASEAN Eng.</li> <li>5. Ir. Hari Dwi Utami, MS, M.Appl.Sc., Ph.D., IPM, ASEAN Eng.</li> <li>6. Dr. Siti Azizah, S.Pt., M.Sos., M.Commun.</li> <li>7. Dr. Ir. Kuswati, MS, IPM, ASEAN Eng.</li> <li>8. Dr. Ir. Moch. Nasich, MS</li> <li>9. Dr. Ir. Puguh Suryowardojo, MP</li> <li>10. Dr. Ir. Umi Wisaptiningsih Suwandi, MS</li> <li>11. Dr. Ir. Muharlieni, MP</li> <li>12. Dr. Ir. M. Halim Natsir, MP, IPM, ASEAN Eng.</li> </ol>
Language	Bahasa Indonesia, English
Relation to curriculum	Study Program: Animal Science Type: Compulsory
Type of Teaching contact hours	Contact hours and class size separately for each teaching method: lecture, lesson, project, practical etc.
Workload	Courses : 90,67 hours/semester Practical : 1,70 hours/semester
Credit Weight	3 credits / 5.10 ects
Requirements according to the examination regulations	-
Recommended prerequisites	-
Requirements for Passing the Course	-
Prerequisite Course	Applied Statistics and Experimental Design (PEF60003)

Module objectives/intended learning outcomes

Learning Outcomes:

1. Contributing to the escalation and development of quality of life locally and globally (LO 2)
2. Capability to analyse the development and implementation of technology through humanities, ethical and scientific value as to provide appropriate solutions and ideas (LO 5)
3. Capability to effectively communicate the thought, concept, implementation and analysis in oral and written form, nationally and internationally (LO 9)
4. Capability to ethically design and perform experiments, analyze and interpret data as to provide sustainable problem solving in Animal Science ( LO 12)

Course Learning Outcomes:

1. Explain the importance of integrity (honesty and ethics) in preparing research, reporting research results, and preparing scientific works.
2. Explain the conceptual background, theoretical framework/concept, literature review, experimental research methodology, survey, and qualitative aspects.
3. Implement the preparation of experimental research proposals theoretically and practically in the laboratory and the field, survey and qualitative research.
4. Conceptualize scientific articles and present scientific presentations properly.

Objectives: This course includes comprehension in writing a research proposal, research reports, and scientific works in the field of animal science which include; writing a research background, problem identification and formulation, research objectives and benefits, hypotheses, literature review, framework/concept, research methods and research operational framework, selection of statistical designs and data analysis, presentation and interpretation of results and discussion, conclusions and suggestions, references and appendices, introduction to the types of scientific publications, and the principles and practices of scientific presentation in the form of seminar presentations.

Knowledge: Explain the conceptual background, theoretical framework/concept, literature review, experimental research methodology, survey, and qualitative aspect, the importance of integrity (honesty

	<p>and ethics) in preparing research, reporting research results, and preparing scientific work</p> <p>Skills: cognitive- Conceptualize scientific articles and present scientific presentations properly. Physicomotoric-Students are Implement the preparation of experimental research proposals theoretically and practically in the laboratory and the field, survey and qualitative research.</p> <p>Competences: able to Selection of research topics, Scientific Writing,</p>
Learning Content	<ol style="list-style-type: none"> <li>1. Definition of Scientific Research and Scientific Work, Utilization of Research Methods and Scientific Work and the Relationship among Disciplines of Science</li> <li>2. Selection of research topics and writing introduction</li> <li>3. How to Write a Literature Review</li> <li>4. Definition and How to Write a Framework of Thinking</li> <li>5. Description and Method of Preparation of Research Methodology and How to Choose Methods in accordance with Research Topic</li> <li>6. Writing Results and Discussion</li> <li>7. Scientific Presentation Techniques</li> <li>8. Writing Conclusions, Suggestions, and Attachments</li> <li>9. Designing Literature Studies</li> <li>10. Description of Scientific Work</li> <li>11. Manuscript preparation techniques for journals</li> <li>12. Manuscript Compilation Practices for Journals</li> </ol>
Study and examination requirements and forms of examination	<p>Attendance &gt; 80%</p> <p>Final Score &gt; 44</p> <p>The final score component:  30% Midterm Exam, 30 % Final Exam, 20% Structured Assignments, 10% Quiz, and 10% Activeness</p> <p>A : 80 &lt; Final Score ≤ 100  B+ : 75 &lt; Final Score ≤ 80  B : 69 &lt; Final Score ≤ 75  C+ : 60 &lt; Final Score ≤ 69  C : 55 &lt; Final Score ≤ 60  D : 50 &lt; Final Score ≤ 55  D+ : 44 &lt; Final Score ≤ 50</p>
Test Terms and Forms	<p>Examination Requirements: A minimum of 80% attendance to attend the Final Exam.</p> <p>The form of the test: Multiple choices and/or Essay</p>
Learning Media	Projector and screens, VLM, Google Classroom

References

1. Statistika dan Rancangan Percobaan Penerapan dalam Bidang Peternakan (Herni sudarwati et al., UB Press).
2. Metode Penelitian (Metode Percobaan dan Karya Ilmiah) (Yogi Sugito, UB Press).
3. Metode Penelitian (kupas Tuntas Mencapai Tujuan) (Sri Kumala Ningsih, UB Press).
4. Prinsip-Prinsip Menyusun Kuisisioner (Eko Nugroho, UB Press).