


|   |  |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|---|--|--|----------------------------|--|--------------------------|--|------------------------------|-------------------------|-----|------|----|----|----|----|----|----|--|--|--|--|--|--|--|--|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
|  |  | <b>Universitas Negeri Surabaya</b><br><b>Faculty of Mathematics and Natural Sciences</b><br><b>Undergraduate Mathematics Study Program</b> |                            |  |                          |  | <b>Document Code</b>         |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>SEMESTER LEARNING PLAN</b>   |  |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>Courses</b>  |  | <b>CODE</b>  | <b>Course Family</b>       |  | <b>Credit Weight</b>     |  | <b>SEMESTER</b>              | <b>Compilation Date</b> |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| Writing Scientific Papers   |  | 4420102101   |                            |  | T=2                      | P=0                                      | ECTS=3.18                    | 3<br>July 17, 2024      |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>AUTHORIZATION</b>  |  | <b>SP Developer</b>  |                            | <b>Course Cluster Coordinator</b>  |                          | <b>Study Program Coordinator</b>         |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   |  | .....  |                            | .....  |                          | Prof. Dr. Raden Sulaiman,<br>M.Si.       |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>Learning model</b>   | Project Based Learning   |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>Program Learning Outcomes (PLO)</b>  | PLO study program that is charged to the course  |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   | Program Objectives (PO)  |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   | PLO-PO Matrix  |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 100px; height: 30px;"></td> <td style="width: 100px; height: 30px; text-align: center;">P.O</td> </tr> </table>   |  |                            |  |                          |  |                              |                         |     | P.O  |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   | P.O  |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>Short Course Description</b>   | This course examines various concepts and theories related to techniques for writing scientific papers, as well as practicing writing scientific papers. The concepts/theories that will be studied include the nature and characteristics of scientific work, preparation for writing scientific work, use of libraries in writing scientific work, components of scientific work, tips for writing scientific work, review, finalization and socialization of scientific work through active learning based assignments presented in theoretical form.   |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   | <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td rowspan="2" style="width: 50px; height: 30px; text-align: center;">P.O</td> <td colspan="16" style="text-align: center;">Week</td> </tr> <tr> <td style="width: 20px; text-align: center;">1</td> <td style="width: 20px; text-align: center;">2</td> <td style="width: 20px; text-align: center;">3</td> <td style="width: 20px; text-align: center;">4</td> <td style="width: 20px; text-align: center;">5</td> <td style="width: 20px; text-align: center;">6</td> <td style="width: 20px; text-align: center;">7</td> <td style="width: 20px; text-align: center;">8</td> <td style="width: 20px; text-align: center;">9</td> <td style="width: 20px; text-align: center;">10</td> <td style="width: 20px; text-align: center;">11</td> <td style="width: 20px; text-align: center;">12</td> <td style="width: 20px; text-align: center;">13</td> <td style="width: 20px; text-align: center;">14</td> <td style="width: 20px; text-align: center;">15</td> <td style="width: 20px; text-align: center;">16</td> </tr> </table> |  |                            |  |                          |  |                              |                         | P.O | Week |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| P.O   | Week   |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   | 1  | 2  | 3                          | 4  | 5                        | 6  | 7                            | 8                       | 9   | 10   | 11 | 12 | 13 | 14 | 15 | 16 |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>References</b>   | <b>Main :</b>  |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   | <ol style="list-style-type: none"> <li>1. Cargill, Margaret. 2013. Writing Scientific Research Articles, John Wiley &amp; Sons Inc .</li> <li>2. Katz, Michael Jay. 2009. From Research to Manuscript, A Guide to Scientific Writing, Springer .</li> <li>3. Ashley, Mike. 2005. How to Write a Paper, University of Cambridge 6rd Edition. Cambridge</li> <li>4. Mack, Chris A. 2018. How to Write a Good Scientific Paper, SPIE, Washington.</li> <li>5. Day, Robert A. &amp; Grestel, Barbara. 2012. How to Write and Publish a Scientific Paper, 7th Edition. Cambridge University Press.</li> <li>6. Reis, Simone Rosa Nunes &amp; Reis, André Inácio. 2014. How to Write Your First Scientific Paper. Conference IEDEC Paper.</li> </ol>   |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   | <b>Supporters:</b>   |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>Supporting lecturer</b>  | Dr. Yusuf Fuad, M.App.Sc.<br>Yuliani Puji Astuti, S.Si., M.Si.<br>Rudianto Artiono, S.Pd., M.Si.<br>Budi Priyo Prawoto, S.Pd., M.Si.   |  |                            |  |                          |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| <b>Week-</b>  | <b>Final abilities of each learning stage (Sub-PO)</b>   | <b>Evaluation</b>  |                            | <b>Help Learning, Learning methods, Student Assignments, [ Estimated time]</b> |                          | <b>Learning materials [ References ]</b> | <b>Assessment Weight (%)</b> |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
|   |  | <b>Indicator</b>   | <b>Criteria &amp; Form</b> | <b>Offline ( offline )</b>   | <b>Online ( online )</b> |  |                              |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |
| (1)   | (2)  | (3)  | (4)                        | (5)  | (6)                      | (7)                                      | (8)                          |                         |     |      |    |    |    |    |    |    |  |  |  |  |  |  |  |  |  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |

|   |  |   |  |   |  |  |    |
|---|--|---|--|---|--|--|----|
| 1 | Able to explain the essence of scientific work   | <ul style="list-style-type: none"> <li>· state the meaning of a scientific work</li> <li>· state the purpose and benefits of writing a scientific work</li> <li>· state the characteristics of a scientific work</li> <li>· state the structure of the presentation of a scientific work</li> <li>· give examples of the components and substance of a scientific work</li> <li>· differentiate the language used in scientific works from the language used in other works.</li> </ul> |  | 2 X 50  |  |  | 0% |
| 2 | Able to describe the components of scientific work                                       | <ul style="list-style-type: none"> <li>· Distinguish between types of scientific work</li> <li>· Mention the components of scientific work</li> </ul>   |  | 2 X 50  |  |  | 0% |
| 3 | Able to describe the components of scientific work                                       | <ul style="list-style-type: none"> <li>· Distinguish between types of scientific work</li> <li>· Mention the components of scientific work</li> </ul>   |  | Collaborative Learning Approach (Lecture, discussion and question and answer)<br>2 X 50 |  |  | 0% |
| 4 | Able to describe the components of scientific work                                       | <ul style="list-style-type: none"> <li>· Distinguish between types of scientific work</li> <li>· Mention the components of scientific work</li> </ul>   |  | Collaborative Learning Approach (Lecture, discussion and question and answer)<br>2 X 50 |  |  | 0% |
| 5 | Able to conduct literature reviews and create a matrix of the latest scientific studies. | <ul style="list-style-type: none"> <li>· Able to select and sort literature used as material for writing scientific papers</li> <li>· Able to create a study update matrix from several literatures that have been read</li> <li>· Able to collect information as material for writing scientific papers</li> </ul>   |  | Collaborative Learning Approach (Lecture, discussion and question and answer)<br>2 X 50 |  |  | 0% |

|    |  |   |  |  |  |  |    |
|----|--|---|--|--|--|--|----|
| 6  | Able to conduct literature reviews and create a matrix of the latest scientific studies. | · Able to select and sort literature used as material for writing scientific papers · Able to create a study update matrix from several literatures that have been read Able to collect information as material for writing scientific papers |  | Collaborative Learning Approach (Lecture, discussion and question and answer) 2 X 50 |  |  | 0% |
| 7  | Able to express ideas into scientific studies.   | · Able to create a mind map to express ideas and conduct related literature reviews. Able to formulate problems, objectives and benefits of the study to be conducted   |  | Collaborative Learning Approach (Lecture, discussion and question and answer) 2 X 50 |  |  | 0% |
| 8  | Able to express ideas into scientific studies.   | · Able to create a mind map to express ideas and conduct related literature reviews. Able to formulate problems, objectives and benefits of the study to be conducted   |  | Collaborative Learning Approach (Lecture, discussion and question and answer) 2 X 50 |  |  | 0% |
| 9  |  |   |  |  |  |  | 0% |
| 10 |  |   |  |  |  |  | 0% |
| 11 |  |   |  |  |  |  | 0% |
| 12 |  |   |  |  |  |  | 0% |
| 13 |  |   |  |  |  |  | 0% |
| 14 |  |   |  |  |  |  | 0% |
| 15 |  |   |  |  |  |  | 0% |
| 16 |  |   |  |  |  |  | 0% |

#### Evaluation Percentage Recap: Project Based Learning

| No | Evaluation | Percentage |
|----|------------|------------|
|    |            | 0%         |

#### Notes

1. **Learning Outcomes of Study Program Graduates (PLO - Study Program)** are the abilities possessed by each Study Program graduate which are the internalization of attitudes, mastery of knowledge and skills according to the level of their study program obtained through the learning process.
2. **The PLO imposed on courses** are several learning outcomes of study program graduates (CPL-Study Program) which are used for the formation/development of a course consisting of aspects of attitude, general

- skills, special skills and knowledge.
3. **Program Objectives (PO)** are abilities that are specifically described from the PLO assigned to a course, and are specific to the study material or learning materials for that course.
  4. **Subject Sub-PO (Sub-PO)** is a capability that is specifically described from the PO that can be measured or observed and is the final ability that is planned at each learning stage, and is specific to the learning material of the course.
  5. **Indicators for assessing** abilities in the process and student learning outcomes are specific and measurable statements that identify the abilities or performance of student learning outcomes accompanied by evidence.
  6. **Assessment Criteria** are benchmarks used as a measure or measure of learning achievement in assessments based on predetermined indicators. Assessment criteria are guidelines for assessors so that assessments are consistent and unbiased. Criteria can be quantitative or qualitative.
  7. **Forms of assessment:** test and non-test.
  8. **Forms of learning:** Lecture, Response, Tutorial, Seminar or equivalent, Practicum, Studio Practice, Workshop Practice, Field Practice, Research, Community Service and/or other equivalent forms of learning.
  9. **Learning Methods:** Small Group Discussion, Role-Play & Simulation, Discovery Learning, Self-Directed Learning, Cooperative Learning, Collaborative Learning, Contextual Learning, Project Based Learning, and other equivalent methods.
  10. **Learning materials** are details or descriptions of study materials which can be presented in the form of several main points and sub-topics.
  11. **The assessment weight** is the percentage of assessment of each sub-PO achievement whose size is proportional to the level of difficulty of achieving that sub-PO, and the total is 100%.
  12. TM=Face to face, PT=Structured assignments, BM=Independent study.