## MODULE HANDBOOK

| Module Name                 | Research Methodology   |  |  |
|-----------------------------|--|--|--|
| Module level                | Bachelor   |  |  |
| Abbreviation, if applicable | 8420403192   |  |  |
| Sub-heading, if applicable  | -  |  |  |
| Course included in the      | -  |  |  |
| module, if applicable       |  |  |  |
| Semester/term               | 5 <sup>th</sup> /Third Year  |  |  |
| Module coordinator(s)       | Dr. Achmad Lutfi, M.Pd.  |  |  |
| Lecturer(s)                 | Dr. Ismono, M.S.   |  |  |
| Language                    | Indonesian   |  |  |
| Classification within the   | Compulsory Course  |  |  |
| curriculum                  |  |  |  |
| Teaching format/class       | 3 hours lecturers (50 min per hours)   |  |  |
| hours per week during the   |  |  |  |
| semester:                   |  |  |  |
| Workload:                   | 3 x 50 minutes lectures, 3 x 60 minutes structured activity,   |  |  |
|                             | 3 x 60 minutes individual activity, 14 weeks per semester,   |  |  |
|                             | 119 total hours per semester ~ 4.77 ECTS**   |  |  |
| Credit points:              | 3 CU = 3 x 1.59 = 4.77 ECTS  |  |  |
| Prerequisite course(s):     | -  |  |  |
| Targeted learning outcomes: | <ul> <li>CLO 1. Able to design, carry out research, and publish the results so that they can be used as an alternative to solving problems in the field of chemistry education</li> <li>CLO 2. Able to have the ability to utilize learning resources and ICT-based learning media in understanding the concept of research methodology</li> <li>CLO 3. Able to make decisions about the basic concepts of research methodology and apply them based on the research paradigm, thinking frameworks, hypotheses, and variables, population and samples, research instruments, research designs, data collection techniques, and data analysis packaged in the form of a draft educational research proposal. MIPA as a course output.</li> <li>CLO 4. Able to show an attitude of responsibility for work in their field of expertise independently.</li> </ul> |  |  |
| Content:                    | <ol> <li>Source of Knowledge and kinds of truth</li> <li>The nature of science and the nature of research</li> <li>Research Methodology in Education</li> <li>Paradigm and type of research</li> <li>The essence and source of the research problem</li> <li>Identify the design of a study and its variables.</li> <li>Formulation of research problems</li> <li>Experimental research (quantitative)</li> <li>Qualitative research</li> <li>Classroom action research</li> <li>Research development</li> </ol>   |  |  |

|                            | 12 Data analysis  |   |  |
|----------------------------|---|---|--|
|                            | <ul><li>12. Data analysis</li><li>13. Formulation of research pro</li></ul>   | nnosals   |  |
| Study / exam achievements: | Students are considered to complete the course and pass if they obtain at least 40% of maximum final grade. The final grade (NA) is calculated based on the following ratio:  |   |  |
|                            | Assessment Components   | Percentage of contribution                                |  |
|                            | Participation Participation   | 20%   |  |
|                            | Assignment  | 30%   |  |
|                            | Mid-semester test   | 20%   |  |
|                            |   | 30%   |  |
|                            | Final semester test   | 30%   |  |
| Media:                     | Computer, LCD, White board  |   |  |
| Learning Methods           | Individuals assignment, group assignment, discussion, dar   |   |  |
|                            | presentation.  1. Ary, Donald, et. Al. 1982. Pengantar Penelitian Pendidikan(terjemahan oleh Arief Furchan). Surabaya: Usaha Nasional 2  2. Faisal,Sanapiah. 1982. Metodologi Penelitian Pendidikan. Surabaya:Penerbit Usaha Nasional  3. Ferguson,George A. 1981. Statistical Analysis in Psychology and Education. London: McGraw-Hill International Book Company.  4. Fraenke, J. R. and Wallen, N. E. 2003. How to Design and Evaliate Research in Educatipn – Fihth Edition. Boston: McGraw Hill  5. Shumway, Richard J (Ed.). 1980. Researchin Mathematics education. Reston,Virginia: The National Council of Teachersof Mathematics, Inc  6. Merriam, Sharan B, 1998. Qualitatif Research and Case StudyApplication in Education. San Fransisco: Jossey Bass Publisher  7. Moleong, Lexy J. 2004.MetodologiPenelitian Kualitatif. Bandung: Remaja Rosdakarya 8. Muhadjir, Noeng. 2000. MetodologiPenelitian Kualitatif. Edisi IV  8. Brannen, Julia. 1996. Memadu MetodePenelitian Kualitatif & Kualitatif(Terjemahan oleh Kurde, N. A, dkk)Yogyakarta: Pustaka Pelajar  9. Suharsini Arikunto. 1990. Manajemen Penelitian. Jakarta:Penerbit: PT Rineka Cipta  10. TimPelatih Proyek PGSM. 1999. Penelitian Tindakan Kelas. Jakarta: Proyek PGSM  11. TimUnesa. 2000. Buku Penulisan Skripsi. Surabaya: Universitas NegeriSurabaya.  12. Vockell, E. L and Asher J. W. 2002. Educational Research |   |  |
| Notes:                     |   | three periods consist of: (a) classroom or laboratory (50 |  |

| minutes); (b) structured activity (60 minutes); and (c)      |
|--|
| individual activity (60 minutes) according to the Regulation |
| of Indonesia Ministry of Research, Technology, and Higher    |
| Education No. 44 Year 2015 jo. the Regulation of Indonesia   |
| Ministry of Research, Technology, and Higher Education       |
| No. 50 Year 2018.  |
| **1 CU 150 ECTS according to Depter Depter Of                |

\*\*1 CU = 1.59 ECTS according to Rector Decree Of Universitas Negeri Surabaya No. 598/Un38/Hk/Ak/2019