## 2. Research 1

Module designation	Research 1
Module level, if applicable	-
Code, if applicable	PCIL 9135
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	1 <sup>st</sup> Semester
Person responsible for the module	Head of Study Program
Lecturer	Principal Supervisor and Co-Supervisor
Language	Indonesian and English
Relation to curriculum	Compulsory
Type of teaching, contact hours	<ul> <li>Discussion with Principal Supervisor (32 hours, 2 weekly for 16 weeks)</li> <li>Discussion with Co-Supervisor (32 hours, 2 weekly for 16 weeks)</li> <li>Independent work on reading materials and literature review (128 hours, 8 hours weekly for 16 weeks)</li> <li>Developing research proposal (128 hours, 8 hours weekly for 16 weeks)</li> <li>Preparing progress report (16 hours, 1 hour weekly for 16 weeks)</li> <li>Preparing presentation materials (16 hours, 1 hour weekly for 16 weeks)</li> <li>Preparing manuscript and conference (20.8 hours, 1.3 hours weekly for 16 weeks)</li> <li>Total hours in 1 semester = 373 hours</li> </ul>
Student Workload for One ECTS	<ul> <li>Face-to-face discussion with Principal Supervisor (1.78 hours)</li> <li>Face-to-face discussion with Co-Supervisor (1.78 hours)</li> <li>Independent work (reading books, materials, papers, literature review, etc.: 7.11 hours)</li> <li>Developing proposal draft (introduction, research method, research framework, data analysis techniques, etc.: 7.11 hours)</li> <li>Preparing presentation materials for discussion with supervisors (1.15 hours)</li> <li>Initial stage to prepare manuscript and conference (1.15 hours)</li> <li>Total workload for one ECTS = 20.72 hours</li> </ul>

Laboratory Work  Credit points	Students taking this course have the chance to utilize the laboratory within the Diponegoro University according to each student's research needs  3 SKS which equivalent to 18 ECTS
Requirements according to the examination regulations	Participate in monitoring and evaluating progress of the preparation of the dissertation organized by the Study Program; Collecting of portfolio of progress report for dissertation.
Recommended prerequisites	Existing competencies in literature review and scientific writing.
Module objectives/intended learning outcomes	<ul> <li>Able to compile research plan.</li> <li>Able to compile proposal dissertation.</li> </ul>
Content	<ul> <li>Introduction to Research Course I</li> <li>Review of Research Problems, Research Objectives</li> <li>State of the Art Review and Research Hypotheses</li> <li>Operational Definitions, Indicators, and Research Variables</li> <li>Theoretical Framework and Research Concept Framework</li> <li>Research Fishbone Diagram</li> <li>Presentation of the Progress Report of the Dissertation Research Proposal</li> <li>Students collect portfolios and the development of the preparation of the dissertation</li> </ul>
Study and examination requirements and forms ofexamination	<ul> <li>Mid-semester progress report assessment, final progress report assessment.</li> <li>The final grade in the module is composed of 80% performance on portfolio of progress reports, 20% participation in monitoring and evaluating. Students must submit a portfolio of progress reports and a draft dissertation according to the targeted stages as a minimum achievement to pass.</li> </ul>
Media employed	Power point
Reading materials	Kasperson, J. X., Kasperson, R. E., Turner, B. L., Hsieh, W., & Schiller, A. (2022). Vulnerability to global environmental change. In The social contours of risk (pp. 245-285). Routledge.  Louv, R., & Fitzpatrick, J. W. (2012). Citizen science: Public participation in environmental research. Cornell University Press.  Pohl, C. (2005). Transdisciplinary collaboration in environmental research. Futures, 37(10), 1159-1178.  Svarstad, H., Petersen, L. K., Rothman, D., Siepel, H., & Wätzold, F. (2008). Discursive biases of the environmental

research framework DPSIR. Land use policy, 25(1), 116-
125.