3. Research 2

Module designation	Research 2
Module level, if applicable	-
Code, if applicable	PCIL 9273
Subtitle, if applicable	-
Courses, if applicable	-
Semester(s) in which the module is taught	2nd 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	• Discussion with Principal Supervisor (32 hours, 2 hours weekly for 16 weeks) • Discussion with Co-Supervisor (32 hours, 2 hours weekly for 16 weeks) • Reading materials and literature review (128 hours, 8 hours weekly for 16 weeks) • Developing data collection strategy (128 hours, 8 hours weekly for 16 weeks) • Developing data analysis strategy (112 hours, 7 hours weekly for 16 weeks) • Preparing progress report (35 hours, 2.2 hour weekly for 16 weeks) Total hours in 1 semester = 467 hours
Student Workload for One ECTS	• Face-to-face discussion with Principal Supervisor (1.07 hours) • Face-to-face discussion with Co-Supervisor (1.07 hours) • Independent work (reading books, materials, papers, literature review, etc.: 4.27 hours) • Developing research conceptual and pathway framework in data collection (4.27 hours) • Developing research conceptual and pathway framework in data analysis (3.73 hours) • Preparing presentation materials for result and progress presentation (improvements, challenges, constraints, etc.: 1.17 hours) • Total workload for one ECTS = 15.58 hours

Laboratory Work	Students taking this course have the chance to utilize the computer laboratory within the Diponegoro University to practice the environmental modelling and simulation
Credit points	7 SKS which equivalent to 30 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	• Able to design research according to scientific research methodology. • Able to carry out scientific research for doctoral program dissertation.
Content	• Introduction to Research Course II • Roadmap and Research Design • Population, Sample and Research Variables • Data collection technique • Research Data Analysis Method • Data Analysis Design • Research for Scientific Publications • Data Analysis Design • Research for Advanced Scientific Publications • Progress Report Presentation • Dissertation Research Proposal Design • Students collect portfolios and progress • dissertation preparation
Study and examination requirements and forms ofexamination	• Mid-semester progress report assessment, final progress report assessment. • 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.
Media employed	Power point
Reading Materials	Glatthorn, A. A., & Joyner, R. L. (2005). Writing the winning thesis or dissertation: A step-by-step guide. Corwin Press. 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. Randolph, J. (2009). A guide to writing the dissertation literature review. Practical Assessment, Research, and Evaluation, 14(1), 13. 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