

## SEMESTER LEARNING PLAN AND/OR COURSE CONTENT

### 1. ENVIRONMENTAL SCIENCE AND PHILOSOPHY

Module/Course Title: Environmental Science and Philosoph					
Module courses code	Student workload 2x50'	Credits 2 Credits	Semester 1	Frequency	Duration
1	<b>Type of course</b> Regular/Full Time	<b>Contact hours</b>	<b>Independent study</b>	<b>Class size</b>	
2	<b>Prerequisites for participation (if applicable)</b>				
3	<b>Learning outcomes</b> <ul style="list-style-type: none"> <li>- Have a comprehensive understanding of the different theoretical and philosophical diagnoses of environmental problems, and be able to understand a different theoretical approach may lead to different environmental practices.</li> <li>- Mastering scientific philosophy, theories and concepts of environmental science and using them to solve environmental problems with an interdisciplinary perspective to support sustainable development</li> </ul>				
4	<b>Subject aims/Content</b> Multiperception about nature; metaphysic of nature, social systems and transformation, nature and responsibility, Environmental ethics. The concept and scope of environmental science, structure and organization, activities and functions of ecosystem. The concept of energy, matter and information in management ecosystem. Natural resources components and the concept of environmental carrying capacity. Dynamic interactions between environmental/ecological components. Environmental challenges and problems. The concept of sustainable development and sustainable development indicators.				
5	<b>Teaching methods</b> <b>Encounter 1</b> - Eastern and Western philosophy of nature: an introduction <b>Encounter 2</b> Philosophy Environment: <ul style="list-style-type: none"> <li>- Definition</li> <li>- 21st Century: Final round of environmental disaster</li> <li>- Human and environmental behavior</li> <li>- Discussion</li> </ul> <b>Encounter 3</b> Towards the Age of Ecology: <ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Comparison of perspectives of the industrial and ecological era</li> <li>3. discussion</li> </ol>				

<p><b>Encounter 4</b> GAIA Hypothesis:</p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• GAIA hypothesis</li> <li>• How GAIA works</li> <li>• Analogy from GAIA</li> <li>• Implications of GAIA</li> <li>• Soft and strong GAIA</li> <li>• Criticism of the GAIA hypothesis</li> </ul>
<p><b>Encounter 5</b> deep ecology (1):</p> <ol style="list-style-type: none"> <li>1. What is deep ecology?</li> <li>2. Two ecological approaches</li> <li>3. What does 'deep' mean?</li> <li>4. Basic norms of deep ecology</li> <li>5. Deep ecology and 'dominant' worldview</li> <li>6. Eight basic principles of deep ecology</li> <li>7. Discussion</li> </ol>
<p><b>MIDTERM EXAM</b></p>
<p><b>Encounter 7</b> Environmental Ethics:</p> <ol style="list-style-type: none"> <li>a. Introduction</li> <li>b. Moral responsibility for environment</li> <li>c. Individual, community and corporate environmental ethics</li> </ol>
<p><b>Encounter 8</b></p> <ul style="list-style-type: none"> <li>- Definition and scope; multidisciplinary &amp; interdisciplinarity in environmental science; environmental science and policy; uncertainty and the precautionary principle.</li> <li>- Ecosystem approach in environmental management</li> <li>- Environmental management: definition and characteristics; problems and challenges; ecosystem management and adaptive management</li> </ul>
<p><b>Encounter 9</b></p> <ul style="list-style-type: none"> <li>- Agenda 21: global, national and local</li> <li>- Kyoto Protocol, ISO 14000, Ecolabelling, and environmental conventions (climate change, Ramsar, Cartagena)</li> </ul>
<p><b>Encounter 10</b></p> <ul style="list-style-type: none"> <li>- Sustainable development: definitions and concepts; sustainable development from multiple perspectives; challenges in implementing sustainable development</li> <li>- Sustainable development: challenges in implementing sustainable development; indicators in sustainable development</li> </ul>
<p><b>Encounter 11</b></p> <ul style="list-style-type: none"> <li>- Natural Resources: definition, characteristics, values, challenges in natural resource management, Environmental carrying capacity &amp; <i>Ecological Footprint</i></li> <li>- Matter, Energy and Environment</li> </ul>

	<ul style="list-style-type: none"> <li>- Pollution: Air, water, and land/land pollution (quality) issues; solid waste management; policies in waste management</li> </ul>
	<b>EXAMS FINAL</b>
6	<b>Assessment methods</b> <b>Encounter 1</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>Encounter 2</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>Encounter 3</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>Encounter 4</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>Encounter 5</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>MIDTERM EXAM</b>
	<b>Encounter 7</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>Encounter 8</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>Encounter 9</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>Encounter 10</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>Encounter 11</b> <ul style="list-style-type: none"> <li>- Papers/</li> <li>- Report</li> <li>- &amp; Discussion</li> </ul>
	<b>EXAMS FINAL</b>

7	<p><b>This module/course is used in the following study program /s as well</b> Yes</p>
8	<p><b>Responsibility for module/course</b> 1. Prof. Oekan S. Abdoellah, MA, Ph.D 2. Prof. Parikesit, M.Sc., Ph.D.</p>
9	<p><b>Other Information</b></p> <ol style="list-style-type: none"> <li>1. Ecophilosophy: Towards Transpersonal Ecology (Fox, 1990)</li> <li>2. Deep Ecology (George Sessions, 1985)</li> <li>3. Environment and Philosophy (Pratt, 2000)</li> <li>4. Journal of Environmental Philosophy and Journal of Environmental Ethics</li> <li>5. Lecture Materials (minimum 12x scheduled meetings) Philosophy of Science, Ichary Soekirno</li> <li>6. A number of Philosophy Books were presented, then selected &amp; photocopied</li> <li>7. Env. Sciences (Enger &amp; Smith; 2002); Env. Sciences for environmental management (T. Riordan; 1995).</li> <li>8. Env. Sciences (Enger &amp; Smith; 2002).</li> <li>9. Env management: principles and practices (CJ Barrow; 1999); Sciences for env. management (T. Riordan; 1995).</li> <li>10. Environmental sciences (published in 2002 and thereafter); Environmental philosophy (2000); relevant articles from the internet.</li> <li>11. Agenda 21: strategy to save our planet (D. Sitarz; 1994); Agenda21 Indonesia (MenLH; 1997); documents relevant to the topic published by UN agencies (eg UNEP, UNDP, FAO), World Bank.</li> <li>12. Green development: environment and sustainability for the 3rd world (WM Adams; 2001); Sustainable development: exploring the contradiction (M. Redclift; 1987).</li> <li>13. Green development: environment and sustainability for the 3rd world (WM Adams; 2001); Sustainable development: exploring the contradiction (M. Redclift; 1987).</li> <li>14. Natural resources and environmental economics (Perman R., et al.; 1996); Environmental economics (Tittenberg; 2001); Ecology: theories and practices (2002).</li> <li>15. Env. Sciences: a study of interrelationship 9Enger &amp; Smith: 2002); Env management: principles and practices (CJ Barrow; 1999); Env. Sciences for env. management (T. Riordan; 1995).</li> <li>16. Env. Sciences: a study of interrelationship 9Enger &amp; Smith: 2002); Env management: principles and practices (CJ Barrow; 1999); Env. Sciences for env. management (T. Riordan; 1995).</li> <li>17. Photocopy of Philosophy of Science Lecture Circulation, Ichary Soekirno</li> <li>18. Research methodology; Sumadi Suryabrata, PT Raja Persada – 2004</li> <li>19. A number of Philosophy Books were presented, then selected &amp; photocopied</li> </ol>

## 2. THEORETICAL AND CONCEPTUAL FRAMEWORK OF A RESEARCH

Module/Course Title: Theoretical and Conceptual Framework of a Research					
Module courses code	Student workload	Credits	Semester	Frequency	Duration
UNX20 X08	2x50'	2 Credits	1		
1	<b>Type of course</b> Regular/Full Time	<b>Contact hours</b>	<b>Independent study</b>	<b>Class size</b>	
2	<b>Prerequisites for participation (if applicable)</b>				
3	<b>Learning outcomes</b> Able to develop a clear, coherent, and reasoned conceptual framework and apply it to their works as a researcher or practitioner.				
4	<b>Subject aims/Content</b> Generally containing about: (1) Research and research paradigm, (2) theory and theoretical framework, (3) research and research framework, (4) conceptual framework in qualitative and quantitative research, (5) Development of conceptual framework, and (5) steps composing research framework.				
5	<b>Teaching methods</b> <b>Encounter 1</b> <ul style="list-style-type: none"> <li>- Research and research paradigm</li> <li>- Paradigms, assumptions, and research frameworks</li> </ul> <b>Encounter 2</b> <ul style="list-style-type: none"> <li>- Theory and theoretical framework (<i>what is theory? Characteristics of a theory, what is theoretical framework? Purpose and importance of theoretical framework</i>)</li> </ul> <b>Encounter 3</b> <ul style="list-style-type: none"> <li>- Conceptual framework (<i>Meaning of Conceptual Framework, Differences between Conceptual Framework and Theoretical Framework</i>)</li> </ul> <b>Encounter 4</b> <ul style="list-style-type: none"> <li>- Method composing conceptual framework (Types research framework, namely: (1) theoretical framework, (2) practical framework, and (3) conceptual framework; 4 functions of research framework)</li> </ul> <b>Encounter 5</b> <ul style="list-style-type: none"> <li>- Elements of conceptual framework (Theory as element of conceptual framework, Concept as element conceptual framework, Steps composing conceptual framework)</li> </ul> <b>MIDTERM EXAM</b> <b>Encounter 7</b> <ul style="list-style-type: none"> <li>- Theoretical and conceptual framework (project development on student research)</li> </ul>				

	<p><b>Encounter 8</b> - Theoretical and conceptual framework (project development on student research)</p> <p><b>Encounter 9</b> - Theoretical and conceptual framework (project development on student research)</p> <p><b>Encounter 10</b> - Theoretical and conceptual framework (project development on student research)</p> <p><b>Encounter 11</b> - Theoretical and conceptual framework (project development on student research)</p> <p><b><i>EXAMS FINAL</i></b></p>
6	<p><b>Assessment methods</b></p> <p><b>Encounter 1</b> - Papers/ - Report - &amp; Discussion</p> <p><b>Encounter 2</b> - Papers/ - Report - &amp; Discussion</p> <p><b>Encounter 3</b> - Papers/ - Report - &amp; Discussion</p> <p><b>Encounter 4</b> - Papers/ - Report - &amp; Discussion</p> <p><b>Encounter 5</b> - Papers/ - Report - &amp; Discussion</p> <p><b><i>MIDTERM EXAM</i></b></p> <p><b>Encounter 7</b> - Papers/ - Report - &amp; Discussion</p> <p><b>Encounter 8</b> - Papers/ - Report - &amp; Discussion</p> <p><b>Encounter 9</b> - Papers/ - Report - &amp; Discussion</p> <p><b>Encounter 10</b> - Papers/ - Report</p>

	- & Discussion
	<b>Encounter 11</b> - Papers/ - Report - & Discussion
	<b>EXAMS FINAL</b>
7	<b>This module/course is used in the following study program /s as well</b> No
8	<b>Responsibility for module/course</b> Supervisors
9	<b>Other Information</b> <ol style="list-style-type: none"> <li>1. Biggs, B. and Karlsson. H. (Ed.). 2011. The Routledge Companion to Research in the Arts, London and New York: Routledge.</li> <li>2. Chinn, PL and Kramer, MK (Eds.). 1999. Theory and Nursing: A Systematic Approach. 5th Edition. St. Louis: Mosby.</li> <li>3. deMarris, K. and Lapan, SD (Eds.). 2004. Foundation for Research: Methods of Inquiry in Education and the Social Sciences. Mahwah, New Jersey, London: Lawrence Erlbaum Associate Publishers.</li> <li>4. Flick, U. 2010. An Introduction to Qualitative Research. Fourth Edition. London, Thousand Oaks, New Delhi, Singapore: Sage Publications Ltd.</li> <li>5. George, MW 2008. The Elements of Library Research: What Every Student Needs To Know, Princeton and Oxford: Princeton University Press.</li> <li>6. Guba, EG and Lincoln, YS 1994. "Competing Paradigms in Qualitative Research". In Denzin, NK and Lincoln. (Eds.). Handbook of Qualitative Research. Thousand Oaks: Sage Publications. (pp: 105- 117)</li> <li>7. Thunder. 2016. Method Study artistic. Surakarta: ISI Press.</li> <li>8. Krippendor, K. 2004. Content Analysis: An Introduction to Its Methodology. Thousand Oaks, London, New Delhi: Sage Publications.</li> <li>9. Kuhn, TS 1970. The Structure of Scientific Revolutions. 2nd – ed. Chicago: University of Chicago Press.</li> <li>10. Merriam, SB 1998. Qualitative Research and Case Study Applications in Education. San Francisco: Jossey-Bass.</li> <li>11. Merriam, SB and Simpson, EL (Eds.). 2000. A Guide to Research for Educators and Trainers of Adults. (Updated 2nd ' Edition). Malabar, FL: Krieger.</li> <li>12. Miles, MB and Huberman, AM (Eds.). (1994). Qualitative Data Analysis. Second Edition. Thousand Oaks, CA: Sage Publications.</li> <li>13. Neuman, WL 2007. Basics of Social Research: Qualitative and Quantitative Approaches, Boston: Pearson Education, Inc.</li> <li>14. O'Leary, Z. 2004. The Essential Guide to Doing Research. London, Thousand Oaks, New Delhi: Sage Publications.</li> </ol>

	15. Maxwell, J.A. (2012). Conceptual framework: What do you think is going on? In <i>Qualitative research design: An interactive approach</i> (pp. 39–72). Sage.
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### 3. SEMINAR OF RESEARCH PROPOSAL (SRP)

Module/Course Title: Seminar of Research Proposal					
Module courses code	Student workload	Credits 5 Credits	Semester 2	Frequency	Duration
1	<b>Type of course</b>	<b>Contact hours</b>	<b>Independent study</b> - Independent assignment	<b>Class size</b>	
2	<b>Prerequisites for participation (if applicable)</b>				
3	<b>Learning outcomes</b> 1. Able to design and manage a multi- and interdisciplinary research concept addressing the national or international issues, 2. Able to design a conceptual solution for the environmental problems which are complex and interconnected through research integrating the environmental, social and economic aspects.				
4	<b>Description:</b> Seminar of Research Proposal (SRP) is a seminar that is designed to deliver a dissertation research plan in front of the pannelists, and to get an evaluation and assurance that the proposal meet the requirements in terms of its significance, clarity of issues, state of art, and novelty, propositions or hypotheses elaborated on the framework of thought, and aspects and research variables.				
5	<b>Methods</b> – Resentation – Question and Answer				
6	<b>Assessment Methods</b> – Instrument of evaluation specified for research proposal				
7	<b>Responsibility for module/course</b> – Supervisors and Expert Panel Members				
8	<b>Other Information</b>				

#### 4. KNOWLEDGE DISSEMINATION SKILL

Module/Course Title: Knowledge Dissemination Skill					
Module courses code	Student workload	Credits 5 Credits	Semester 4 or later	Frequency	Duration
1	Type of course	Contact hours	Independent study – Independent assignment	Class size	
2	<b>Prerequisites for participation (if applicable)</b>				
3	<b>Learning outcomes</b> – able to communicate his/her own research results in national and international academic events.				
4	<b>Description:</b> Any activities aimed to disseminate research results or relevant knowledge in conferences organized by either Universitas Padjadjaran, or national/international organisations				
5	<b>Methods</b> – Presentation – Report/paper				
	<b>Assessment Methods</b> – Instrument of evaluation specified for paper or report				
8	<b>Responsibility for module/course</b> – Supervisors				
9	<b>Other Information</b>				

## 5. CAREER DEVELOPMENT SKILL

Module/Course Title: Career Development Skill					
Module courses code	Student workload	Credits 2 Credits	Semester 4 or later	Frequency	Duration
1	Type of course	Contact hours	Independent study	Class size	
2	Prerequisites for participation (if applicable)				
3	<b>Learning outcomes</b> – able to organize events that support her/his own career or profession				
4	<b>Description:</b>  Any activities aimed to contribute profesional development such as (1) training of learning methods, (2) teaching assistant, (3) general or guest lecture, (4) entrepreneurship training, (5) research assistant				
5	<b>Methods</b> – Presentation – Report/paper				
	<b>Assessment Methods</b> – Instrument of evaluation specified for paper or report				
8	<b>Responsibility for module/course</b> – Supervisors				
9	<b>Other Information</b>				

## 6. DISSERTATION

Module/Course Title: Dissertation					
Module courses code	Student workload	Credits 16 Credits	Semester 5 or later	Frequency	Duration
1	<b>Type of course</b>	<b>Contact hours</b>	<b>Independent study</b> – Independent assignment	<b>Class size</b>	
2	<b>Prerequisites for participation (if applicable)</b> – Seminar of Research Proposal				
3	<b>Learning outcomes</b> <ol style="list-style-type: none"> <li>1. able to provide solutions to the environmental problems which are complex and interconnected through research integrating the environmental, social and economic aspects,</li> <li>2. able to organize and lead research involving various discipline, independently and responsibly,</li> <li>3. able to arrange academic report that meet the national or international standards and academic integrity,</li> <li>4. able to communicate results and solution in national and international academic events.</li> </ol>				
4	<b>Description:</b> Dissertation is a completed research work of PhD student and documented in a report that meet the academic regulation. A dissertation manuscript is rated into three components (Seminar of Research Result (SRR), Dissertation Manuscript Review (DMR), and Final Defense). Research Results Seminar is a seminar aimed to present data in its entirety, along with analysis and discussion of the data obtained in a predetermined format. At the Seminar, an assessment of the dissertation manuscript is carried out to see whether the manuscript meet the eligibility of a scientific manuscript for doctoral level. Dissertation Manuscript Review (DMR) is an evaluation to a manuscript that has been revised based on the Q&A of SRR. It is carried to finalize the manuscript in order to be ready for final examination (defense). While, Final Defense is an examination before a panelist in order to account for research findings and its contributions to knowledge and practices.				
5	<b>Methods</b> <ul style="list-style-type: none"> <li>– Presentation</li> <li>– Question and Answer</li> <li>– Desk evaluation</li> </ul>				
	<b>Assessment Methods</b>				

	- Instrument of evaluation specified for SRR, DMR and Final Defense
8	<b>Responsibility for module/course</b> - Promoters, Expert Panel Members, and Professor Representatives
9	<b>Other Information</b>

