LANDSCAPE ECOLOGY - FOR GRADUATE STUDENTS

LANDSCAPE ECOLOGY COURSE - MATA KULIAH EKOLOGI LANSKAP

EVEN SEMESTER 2015/2016:

ELECTIVE COURSE for MASTER & DOCTOR Students

ARL 621 LANDSCAPE ECOLOGY – 3(3-0): This subject concerns with ecological principles and concepts in the landscape, which is emphasized on landscape structure, landscape function, landscape dynamic and its heterogeneity. It is also concern with landscape conservation-management, and the methodology in landscape ecology as well (Hadi Susilo Arifin, Wahyu Q. Mugnisyah, and Syartinilia Wijaya)

Participants: Welcome for linked students from Study Program of Landscape Architecture (ARL), Natural Resources & Environmental Management (PSL), Agronomy (AGR), Regional Development (PWL), Rural Development (PWD), Forestry/Biodiversity Conservation (KVT)

Class Room: Landscape Management Division Room – Wing 13/Level VI – Dramaga Campus

OR Department of Landscape Architecture W-20 L-4 - Dramaga Campus

Day/Time: Tuesday/14.00 – 16.30
Lecturers: Prof. Dr. Hadi Susilo Arifin (HSA); Prof. Dr. Wahju Qamara Mugnisjah (WQM), Dr. Syartinilia Wijaya (SWI)

<table>
<thead>
<tr>
<th>Week</th>
<th>TOPIC</th>
<th>Lecturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>I16 Feb</td>
<td>Introduction: <a href="http://hsarifin.staff.ipb.ac.id/2016/02/21/landscape-ecology-for-graduate-students/">Syllabi &amp; Time Schedule; Landscape and Principles</a></td>
<td>HSA</td>
</tr>
<tr>
<td>II23 Feb</td>
<td>Ecological Concepts in Brief (physical environment, aquatic environment, population, evolutionary, ecological comm, energy and matter in ecosystems)</td>
<td>HSA</td>
</tr>
<tr>
<td>III01 Mar</td>
<td>LANDSCAPE STRUCTURE – PATCHES: patch origin and change, patch size/shape/number and configuration</td>
<td>HSA</td>
</tr>
<tr>
<td>IV08 Mar</td>
<td>LANDSCAPE STRUCTURE – CORRIDORS: corridors and their origin, structure/line/strip/stream corridors</td>
<td>HSA</td>
</tr>
<tr>
<td>V15 Mar</td>
<td>MATRIX AND NETWORK: Distinguishing a matrix, porosity and boundary shape, network, matrix heterogeneity</td>
<td>HSA</td>
</tr>
<tr>
<td>VI22 Mar</td>
<td>OVERALL STRUCTURE: Micro/macro heterogeneity, configuration of patches, corridors and matrix, contrast in landscape, grain size of the landscape</td>
<td>HSA</td>
</tr>
<tr>
<td>VII29 Mar</td>
<td>LANDSCAPE DYNAMIC: Natural process in landscape development (Geomorphology, establishment of life forms, soil development, natural disturbance) ADDITIONAL MATERIALS as follows: <strong>Blue Open Space Management in Jabodetabek (Hadi Susilo Arifin)</strong></td>
<td>HSA</td>
</tr>
</tbody>
</table>

**GIAHS Mapping in Five Regions of Indonesia (Hadi Susilo Arifin)**
Mid-Test
LANDSCAPE DYNAMIC: The Human Role in Landscape Development (Modification of Natural Rhythms, Method or Tools Used in Landscape Modification, A landscape Modification Gradients)
WQM
LANDSCAPE DYNAMIC: Flows between adjacent landscape elements (Mechanism underlying linkage, airflow and locomotion, soil flow, interaction between land and stream, hedgerow interaction with adjacent landscape element
LANDSCAPE DYNAMIC: Animal and Plant Movement Across a Landscape (Pattern and movement, Movement of animals, movement of plants, some species movement in Agriculture and pest control)
XII03
May
LANDSCAPE DYNAMIC: Landscape Functioning
(Corridors and Flows, Flows and the Matrix, Networks)
WQM
XIII10
May
LANDSCAPE DYNAMIC: Landscape Change
(Stability, Meta-stability, Pattern of Overall landscape change, landscape dynamic, linkage among landscapes)
XIV17
May
HETEROGENEITY AND MANAGEMENT:
Heterogeneity and Typology (Landscape heterogeneity, animal response to heterogeneity, guidelines for landscape typology, The inherent hierarchy in nature, Ascending typology)
SWI
XV24
May
HETEROGENEITY AND MANAGEMENT:
Landscape Management (Production in
landscape, Major landscape type, landscape
quality, modelling and landscape management
SWI
Final Test
BONUS - VIDEO:

1. Ecocity – http://www.youtube.com/watch?v=qHNlrY__O6I

VIDEO Hadi Susilo Arifin in Healthy Living Program – Metro TV – Episode 7 ECOCITY DEVELOPMENT

1. Biodiversity – http://www.youtube.com/watch?v=-Nh9amZj8Y

VIDEO Hadi Susilo Arifin in Healthy Living Program – Metro TV – Episode 8 URBAN BIODIVERSITY CONSERVATION

1. Greenery Open Spaces – http://www.youtube.com/watch?v=KBmUcVZx75g
GREENERY OPEN SPACE

1. Landscape Ecology - http://www.youtube.com/watch?v=82iGnDMs7ZU

VIDEO Hadi Susilo Arifin in Healthy Living Program – Metro TV – Episode 9

VIDEO Hadi Susilo Arifin in Healthy Living Program – Metro TV – Episode 12

LANDSCAPE ECOLOGY