



Department of Civil Engineering 2012 Summer Semester Yoshimura Chihiro

Aquatic Environmental Science

11. Ecosystem & Biodiversity

1. What is an ecosystem?

- Major components
- Difference with "environment"
- Taxonomic system
- Current species richness on earth
- Population, community and ecosystem
- Succession and disturbance
- Interspecies relationship
- Food chain and trophic structure

2. Biodiversity

- 3 levels of biodiversity
- Genetic diversity and modern taxonomy
- Species diversity and diversity index
- Spatial assessment of species diversity
- Ecological niche and environmental filter

3. Exercise