Lectures by Koike

At Graduate School of Agriculture, Division of Environmental Resources,

Research Group of Forest Resources, Lab. of Silviculture and Forest Ecology

Omnibus style

- 1) Ecology of Forest Resources
 - >Topics on Forest Ecophysiology
 - ••• Physiological ecology of woody plants under changing environment for the rehabilitation of forest environment.
- 2) Bio-signal Chemistry
 - >Topics on Forest Biodiversity Conservation
 - · · · Biological interactions and defense characteristics of woody plants under changing environment.
- 3) Lecture on Global Warming Effects (in English)
 - ••• Prediction of the effect of elevated CO₂ on forest ecosystems with a FACE (Free Air CO₂ Enrichment) system and important role of field survey in Siberia, Russia
- 4) Advanced Bio-signal Chemistry (in English)
 - · · · Oak wilt disease and nitrogen stresses affecting symbiosis

At Department of Forest Science

- 1) Silviculture
 - · · · Woody resources production and forest conservation biology under changing environment
- 2) Forest Protection
 - · · · Plant-insect interactions, Forest Pathology, Stress Physiology for forest ecosystem conservation

Omnibus style

- 1) Forest Aesthetics
- · · · A brief history of Forest Aesthetics in Japan, Forest Landscape Management based on Forest ecophysiology. Together with Prof. F. Nakamura (Landscape Ecology) and Dr. Y. Akibayashi (Forest management)
- 2) Forest Ecology (by Dr. M.Shibuya)
- · · · Forest regeneration and forest rehabilitation practices with special references to fir and spruce.
- 3) Forest Function and Environment (by Prof. K.Sasa)
- ...Responses of woody plants to the progress in global warming and nitrogen deposition
- 4) Environmental Chemistry (by Dr. Y. Kojima)
- $\boldsymbol{\cdot\cdot\cdot}$ Topics on Acid rain, Nitrogen saturation, Ozone stress with elevated CO2

At Liberal Arts

- 1) Introduction to Bio-field Science
 - · · · Forest environmental science carried out in university forests and international cooperative studies
- 2) English training course (in English)
 - · · · English training course on "Introduction to forest science"

For International students course (HUSTEP) (in English)

- 1) Environmental Science for Biological Resources
 - • Biological interactions in a forest ecosystem under changing environment
- 2) An Introduction to Bio-Field Science
 - • Forest ecological studies in the experimental forests of Hokkaido University