

<b>Course Name</b>	<b>Environmental Science for Biological Resources</b>		
<b>Semester, Year</b>	Second Semester, 2017	<b>Number of Credits</b>	2 credits
<b>Course level</b>	1000	<b>Course Number</b>	027109
<b>Instructor(s) (Institution)</b>	Fuyuki SATOH (フィールドセンター) Takashi SAITOH (フィールドセンター) Osamu KISHIDA (フィールドセンター) Hideaki SHIBATA (フィールドセンター) Toshiya YOSHIDA (フィールドセンター) Kentaro TAKAGI (フィールドセンター) Masahiro NAKAMURA (フィールドセンター) Takayoshi KOIKE (大学院農学研究院) Shunsuke UTSUMI (フィールドセンター) Akio KOIZUMI (大学院農学研究院)		
<b>Course Objectives</b>	This lecture provides information of the environmental sciences for biological resources of forest in Hokkaido University to foreign students. Many classes will be carried out at the lecture room in Sapporo campus. Some classes will be carried out at the experimental nursery and the university forest belonging to the Field Science Center for Northern Biosphere.		
<b>Course Goals</b>	The students of this class are able to learn the variety of topics concerning for the environmental science of forests as biological resources. The field lesson using university forests will help them to understand the importance forest ecosystems through the practical experience by the students themselves.		
<b>Course Schedule</b>	Week 1 Introduction to conservation biology of forests (Satoh and Koike) Week 2 Forests and forestry in Hokkaido (Yoshida) Week 3 Coexistence of various tree species (Hiura) Week 4 Biogeochemistry of forested ecosystems (Shibata) Week 5 Acid rain problems in forests (Satoh) Week 6 Global warming and forest carbon cycling (Takagi) Week 7 Global warming; an aspect of biological interaction (Koike) Week 8 A challenge for materializing the millennium ecosystem assessment (Koike) Week 9 Global warming effect on plant and insect interactions in forests (Nakamura) Week 10 Forest conservation and protection (Saitoh) Week 11 Forests as precious habitat for wildlife (Saitoh) Week 12 Predator-prey interactions in forests (Kishida) Week 13 Wood utilization in Japan - wood as structural members in timber construction- (Koizumi) Week 14 Community, biodiversity, and evolution of plant-associated arthropods (Utsumi) Week 15 Conclusion (Koike and Satoh)		
<b>Homework</b>	A couple of hours will be necessary for reviewing every class and making reports given by professors.		
<b>Grading System</b>	Number of attendance and making a remark on a report		
<b>Textbooks / Reading List</b>	References will be handed in each class.		
<b>Websites</b>			
<b>Website of Laboratory</b>			
<b>Additional Information</b>	We are planing two field excercises (Tomakomai and Uryu Experiment Forest). In case of field exercise in Uryu forests in northern Hokkaido, the students need accommodation fee (about 5,000 Japanese yen).		