Subject: Practice on GIS and Remote Sensing Technique

Course number ： DMP3802E
Instructor ： Adjunct Prof. Atsuhiro YOROZUYA
Term / Time ： Fall through Spring

1　Course Description
　　The objective of this course is to build capacities for undertaking basi tools, which are expecting to be applied in the individual study. This course introduce the basic technique on Geographic Information System (GIS) and Remote Sensing (RS) technique. The course consists of two components: practice on the GIS, introduction of Remote Sensing (RS) for inundation mapping.

2　Course Outline (Course Topics)
　　Week
　　　　1 ： Geographic Information System (GIS) (1) Basic concept
　　　　2 ： Geographic Information System (GIS) (2) Understanding GIS data structures
　　　　3 ： Geographic Information System (GIS) (3) Working with ArcGIS
　　　　4 ： Geographic Information System (GIS) (4) ArcGIS Data management
　　　　5 ： Geographic Information System (GIS) (5) ArcGIS Data processing
　　　　6 ： Geographic Information System (GIS) (6) ArcGIS Spatial analysis
　　　　7 ： Geographic Information System (GIS) (7) ArcGIS Hydrology analysis
　　　　8 ： Geographic Information System (GIS) (8) ArcGIS Model builder
　　　　9 ： Remote Sensing (1) Basic principles of satellite image
　　　　1 0 ： Remote Sensing (2) Preparation of satellite images
　　　　1 1 ： Remote Sensing (3) Image analysis with tutorial data with ArcGIS
　　　　1 2 ： Remote Sensing (4) Application of image analysis with ArcGIS
　　　　1 3 ： Remote Sensing for Inundation Mapping (1) Case study (1)
　　　　1 4 ： Remote Sensing for Inundation Mapping (2) Case study (2)
　　　　1 5 ： Remote Sensing for Inundation Mapping (3) Case study (3)

3　Grading
　　　　Participation (100%）

4　Textbooks
　4-1 Required
　4-2 Others
　　　　Material made by the instructors