

Geographic Information Systems 地理資訊系統

Serial Number	30003
Course Code	SDA0015*
Instructor	Chen, Chi-Farn
Course Name(Chinese)	地理資訊系統
Course Name(English)	Geographic Information Systems
Credit	3
Teaching goal	The course is designed for students who are interested in Geographic Information Systems. The students in the class are expected to learn: GIS Introduction, Data Acquisition, Vector and Raster Data, Preprocessing of Data, Data Manipulation and Analysis, GIS Applications. In addition, a weekly lab exercise will be employed to supplement the class teaching.
Teaching content	A Geographic Information System (GIS) is a computer system for capturing, storing, querying, analyzing, and displaying geographically referenced data. The course is designed for students who are interesting in GIS and its applications. The instructor will lead the course to a semester-long teaching and discussing in the field of geo-informatics. The course also includes a weekly laboratory exercise. The students in the class are expected to learn the infrastructure of GIS, the fundamental characteristics of GIS data, the basic processing techniques of spatial data, as well as integrated GIS applications.
Textbooks/References	Chang, Kang-tsung, "Introduction to Geographic Information Systems", 4th edition, McGraw Hill, 2008.
Way of Instruction	Lecture
Grading	1. Lab Exam 2. Final Written Exam 3. Lab Exercises 4. Report (Oral and paper)
Office Hour	By Appointment

Core Competencies of Department	Rating	Corresponding Assessments
Global vision	(4) High	Test/Exam , Assignments , Presentation/Oral Exam , Research Report(printed on paper) , Practices/Experiments , Attendance/Performance , Products/Creative Performance
Environmental sustainability	(4) High	Test/Exam
Professional knowledge	(4) High	Test/Exam
Expressiveness & teamwork	(4) High	Test/Exam , Assignments , Presentation/Oral Exam , Research Report(printed on paper) , Practices/Experiments , Products/Creative Performance