

# Fall Semester 2021: GEOG411: Intermediate GIS

Lectures M/W 11:45-12:35 am (BGB301)

Lab F 9:15-11:05 am (session 1) 11:45-1:35 (session 2)

Instructor: Dr. Hyun Kim

This course is designed to give an understanding of Geographic Information Systems (GIS) to the students who have the desire to apply the GIS technology to the specific study/research. Designed to be very practical, this course then focuses on helping students gain working knowledge and skills of GIS, through hands-on experiences.

## Covered topics

- Fundamental GIS theories
- Basic tools in ArcGIS/GIS pro
- Geostatistical Analysis (Spatial Interpolations/ Kriging)
- Cluster analysis
- Location analysis and modeling (Location-allocation analysis)
- Geo API for GIS visualization and mapping
- Applications from labs: Economics, Crime Analysis, Transportation, Public Health, Ecology, Watershed analysis, Land use, Arts, Civil Engineering analysis

