

GEOGRAPHY 4/585: Remote Sensing I

Fall 2021

Schedule (subject to minor changes)

Week	Day	Date	Quiz	Topic	Reading	Lab
1	M	Sep 27		Introduction	No reading	Resolution and scale
	W	Sep 29		Basic concepts		
2	M	Oct 4		EM energy	Principles of Remote Sensing pp 53-80	Spectral transformations
	W	Oct 6		EM energy interactions		
3	M	Oct 11		Sensors	Principles of Remote Sensing pp 86-97, pp 106-160	Analyzing spectral reflectance curves
	W	Oct 13	Quiz 1	Platforms		
4	M	Oct 18		Image classification 1	Principles of Remote Sensing pp 280-306	Supervised and unsupervised classification
	W	Oct 20		Image classification 2		
5	M	Oct 25		Atmospheric correction	Principles of Remote Sensing pp 185-188, pp 411-415, pp 424-436	Change detection
	W	Oct 27	Quiz 2	Change detection		
6	M	Nov 1		Principles of lidar remote sensing	Principles of Remote Sensing pp 345-406	Canopy height measurement using LiDAR
	W	Nov 3		Principles of radar remote sensing		
7	M	Nov 8		History and future of remote sensing	"Intro to GEE" + sign up for GEE account	Earth Engine 101 - Introduction to the API
	W	Nov 10	Quiz 3	Introduction to Google Earth Engine (GEE)		
8	M	Nov 15		Uncrewed aerial vehicles (UAVs)	Fonstad et al. (2013) PDF available on Canvas	3D models with Agisoft Metashape
	W	Nov 17		Stereophotogrammetry		
9	M	Nov 22		Remote sensing of snow and ice	Ryan et al. (in press) PDF available on Canvas	No lab - Thanksgiving
	W	Nov 24		No class - Thanksgiving		
10	M	Nov 29		Class presentations	Bios and websites of grad students in class. Details available on Canvas.	No lab
	W	Dec 1		Class presentations		