Natural Resource Applications of Remote Sensing

	- Temporal animations
4	Exploring spectral regions using ArcGIS Pro
	- Visible spectral regions
	- Near-Infrared spectral region
	- SWIR spectral region
	- Thermal spectral region
	- Hyperspectral remote sensing
	- Analysis of spectral responses
5	Georeferencing with ArcGIS Pro
	- Linear georeferencing model
	- ArcGIS Pro georeferencing toolbar
	- Co-registration of historic imagery
	- Georeferencing photographs
	- Artificial change due to co-registration error
6	Supervised classification
	- Maximum likelihood classifier
	- Supervised classification in ArcGIS
	- Image segmentation
	- Point-based classification accuracy assessment
7	Unsupervised classification
	- Spectral clustering
	- Spectral clustering in ArcGIS
	- Using ArcGIS to fix mixed spectral classes
	- Raster-based classification accuracy assessment
8	AVHRR sensor applications
	- The Advanced Very High Resolution Radiometer (AVHRR)
	- Processing GIMMS-NDVI raster data
	- 20-year change in peak summer NDVI by ecoregion
	- Working with 1-km AVHRR Alaska products
9	MODIS sensor applications
	- MODIS land products
	- Assessing MODIS NDVI reliability
	- Assessing eMODIS NDVI reliability
	- Working with 250-m NDVI tiles in Alaska
	- 500-m snow product in Alaska

- METHOD(S) [30 points]:
    o What did you do with your data in order to achieve your project goal (image processing method (or chain) or algorithm; use flowchart or graphics to show your data processing flow; also explain the data processing steps)
- RESULT(s) [30 points]:
    o Results (use figures and tables; interpret and explain the results)
    o Provide quantitative or qualitative evaluation of your results
    o If your results are not what you hoped for in beginning provide justification
    o Discuss any data or method limitations
- Closing statement [5 points]: Conclusion/ final remark on the project (future direction)

Explanation of NB/I/W Grades: This course adheres to the UAF guidelines regarding the granting of NB Grades. The NB grade is for use only in situations in which the instructor has No Basis upon which to assign a grade. In general, the NB grade will not be granted.

Your instructor follows the University of Alaska Fairbanks Incomplete Grade Policy:

474-5470, speak@uaf.edu   -474-5314, Gruening
8th floor).

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to COVID-19 by regularly checking this
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