

One week to go

Monday 12th: summary review

Wednesday 14th: second exam (10%)

Wednesday/Friday - last lab sessions

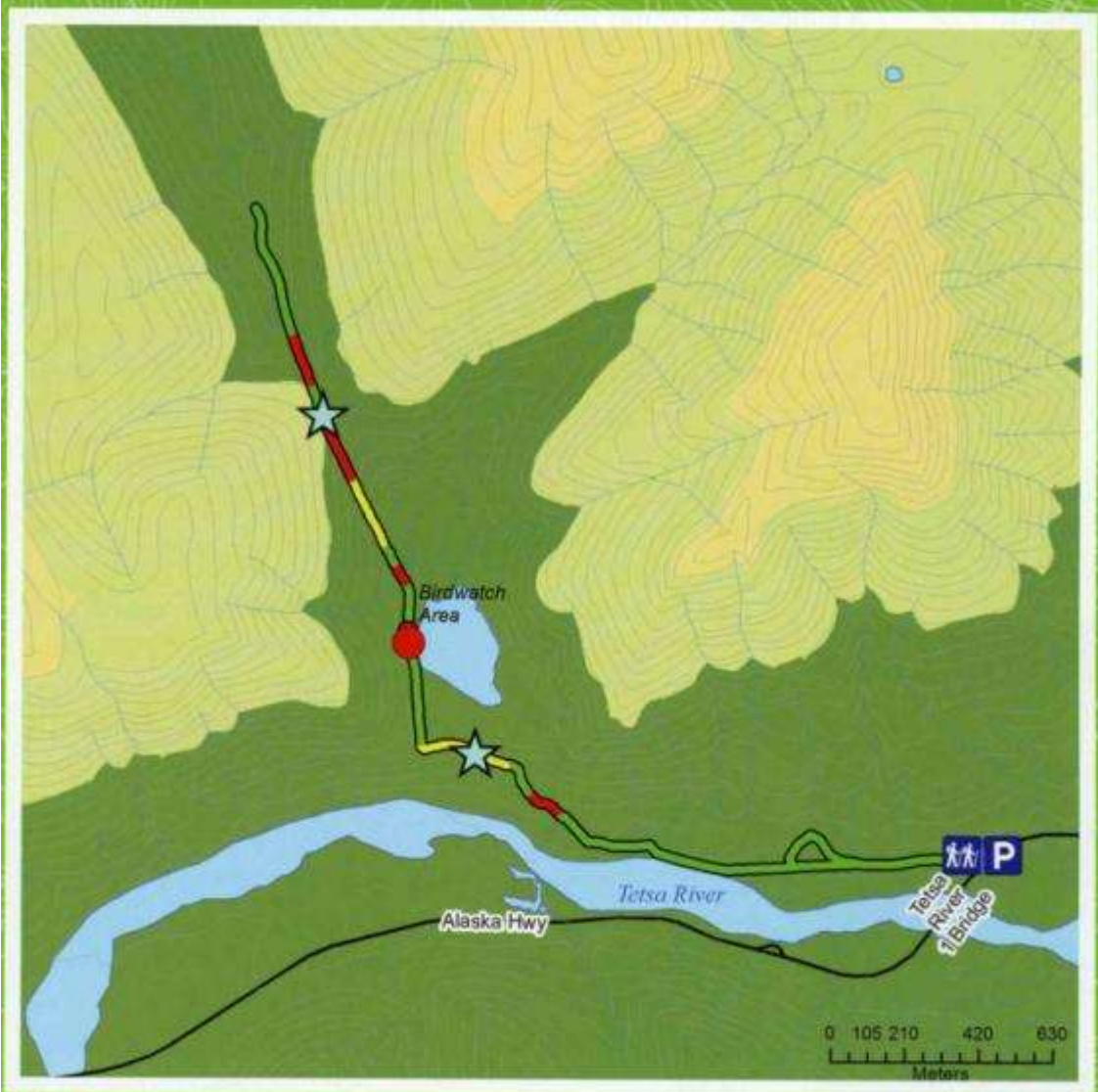
Monday 19th - lecture period -open for project questions; project deadline - avoid need for extensions if possible

In this course, you should have learned:

- General overview of mapping technologies (geomatics)
- Use of (complex) GIS software for map output
- How maps and images are used in projects and the media
- How to generate a map for future projects and courses
- Appreciation of what makes a good display and bad !

Map critique

Tetsa River Park,
near Fort Nelson, BC



Longname	Lat	Long
Parking	58° 40' 2.731" N	124° 26' 31.727" W
Trail Head	58° 40' 2.622" N	124° 26' 36.432" W
Viewpoint	58° 40' 11.309" N	124° 28' 3.184" W
Birdwatch Area	58° 40' 22.115" N	124° 28' 15.957" W
Viewpoint	58° 40' 41.356" N	124° 28' 31.718" W

10 biggest ArcGIS errors (mostly due to defaults)

1. Dumb scale bars - too big, silly units, subdivisions
2. Too much stuff in the legend - too busy (NEVER hillshade)
3. Legend symbols don't match those on the map
4. Poor figure-ground hierarchy
5. Stream widths too thick
6. Too precise numbers/decimals e.g. class group values, lat/long labels
7. Use of elevation layer in gray or single hue (need shading?)
8. Polygon colours too blatant (intense) or too similar
9. Not projecting 'geographic' (lat/long) data
10. Default wetland symbol - and other stripes

PS. If in doubt, add a neatline surrounding box

Making a meaningful map

1. Do I know what my map's story is ?
2. Am I using the right map projection ?
3. Am I using data at the right level of generalization ?
4. Is my symbology clear ?
5. Do my symbols match my data ?
6. Have I used the right text symbols (lettering) ?
7. Does my map have figure-ground organization ?
8. Does my map have good visual hierarchy ?
9. Do I need to add anything else to my map ?
10. Have I asked for a critique ? (Do you dare?)

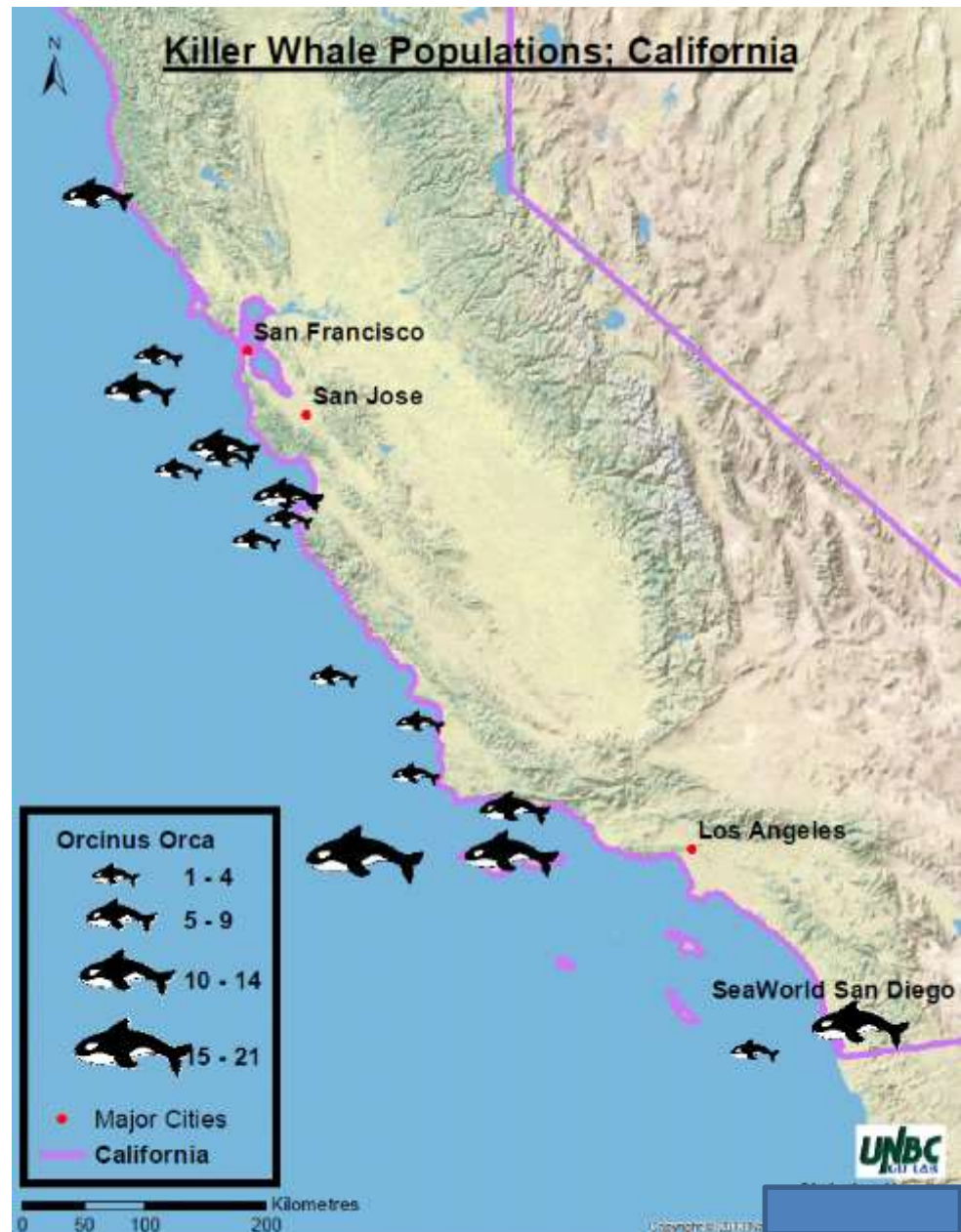
Background layers

From project guide:

“Do NOT use another map as 'raster' background in your final output.” - but a layer e.g. hillshade is OK

- Lettering rough guide:
add minimum 5-6 labels

*Background terrain added
from ArcGIS portal online*



Current trends in mapping

- Apps for mobile devices = 'Ubiquitous cartography'
- Increasing use of google maps / online tools
- Animations - moving maps
- 3D perspectives and software applications
- More and more data e.g. LiDAR
- Mapping from UAVs and more satellites
- Mapping and GPS for everyone

Find a pharmacy near you



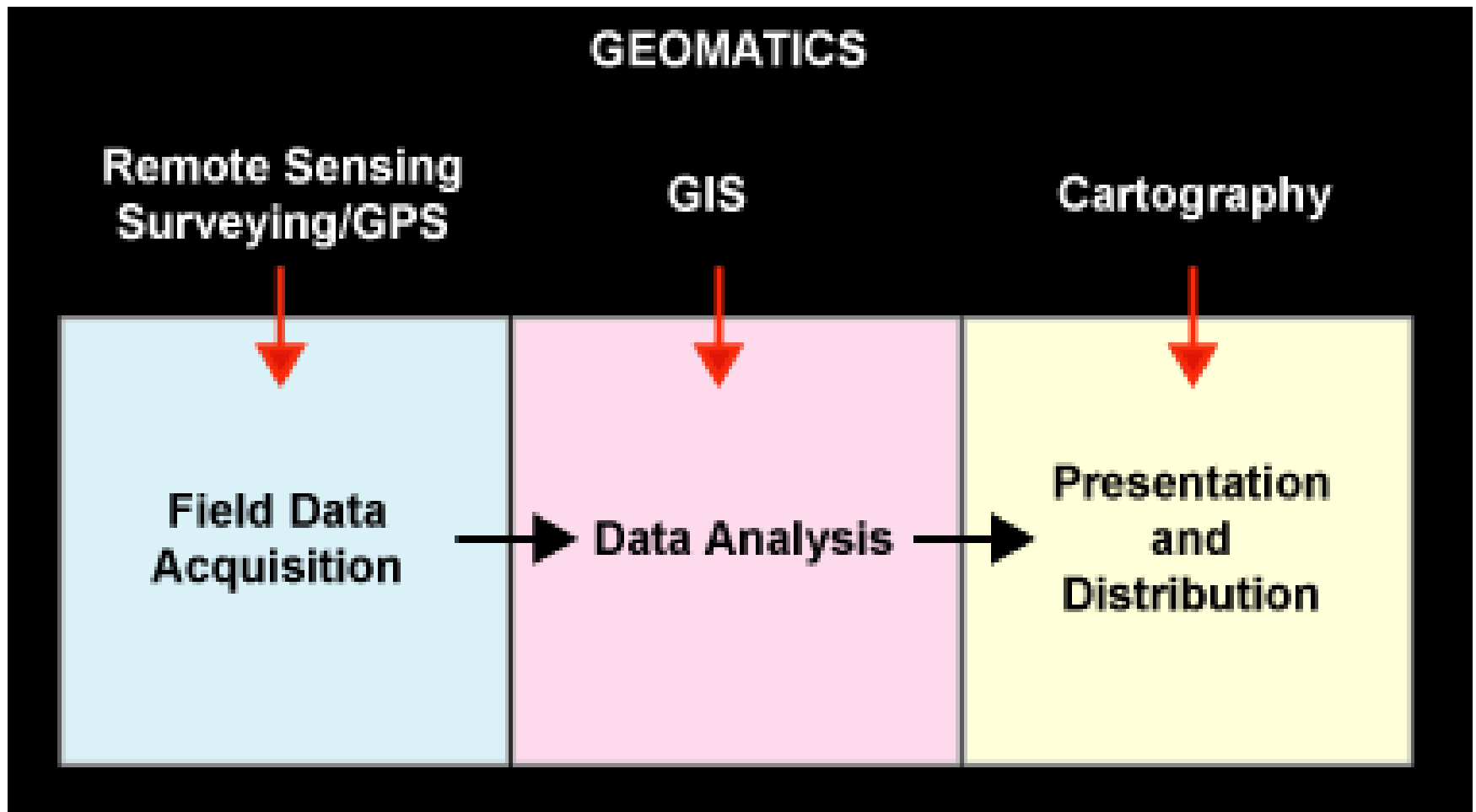
Initial B.C. Pharmacies offering COVID-19 Vaccinations

This map was created by a user. [Learn how to create your own.](#)



<https://www2.gov.bc.ca/gov/content/covid-19/vaccine/pharmacy>

Cartography and Geomatics



https://www.nsc.ca/learning_programs/programs/plandescr.aspx?prg=GIS&pln=GISCRTGEO

“Cartography and Geovisualization”

Further courses in Geomatics, 2021 ->

GEOG204: Introduction to GIS (fall)

GEOG250: Geospatial analysis (fall) (Python programming)

GEOG300: Intermediate GIS (winter)

GEOG357: Remote Sensing (fall)

GEOG413: Advanced GIS (Fall 2022)

GEOG450: Advanced Geospatial Analysis (winter 2022)

GEOG457: Advanced RS (winter 2022)

GEOG499/440: Independent Study/Internship -anytime

Mapping/GIS skills generally in good demand -

Most desirable by employers: ability to write code

UNBC GIS Minor:

5 geomatics courses + two CPSC = 21 credits

= GEOG 204, 205 or 250, 300, 357

+ CPSC110 or 101

+ two of 250, 413, 457, ENPL303

Can specialise in GIS/mapping diploma e.g. BCIT

Second exam (10%) - April 14th 11.30-13.00

non-cumulative: Covering lectures since the last midterm

- Relief depiction and DEMs
- Mountain cartography; GPS
- Map Projections: history and digital / GIS
- Remote sensing / Satellite images
- History of Cartography; digital mapping

[Summary - this lecture]

Short answers and multiple choice

Multiple choice

Q. Multiple choice: Who developed the first map projections ?

- a. The Romans
- b. The Greeks
- c. The Vikings
- d. Leonardo Da Vinci
- e. Gerhard Mercator

Sample short question

Q: What is the difference between Cartography & Geomatics

Last slide

Course reviews by students have faded away

Happy to take feedback - good or bad

Some impressive student work despite the conditions

Complete the bits - exam on Wednesday, project by Monday

All previous assignments handed in ?

Back to campus September or January 2022 ?