

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 !

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?
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?)

10 biggest ArcMap 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

<http://www.esri.com/products/maps-we-love>



Current trends in mapping

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

Tuesday



Wednesday



Thursday





LiDAR UAV

Cartography and Geomatics

GEOMATICS

Remote Sensing
Surveying/GPS

GIS

Cartography

Field Data
Acquisition

Data Analysis

Presentation
and
Distribution



Further courses in Geomatics:

GEOG300: Geographic Information Systems (fall)

GEOG204: GIS for the Social Sciences (fall)

GEOG432: Remote Sensing (fall)

GEOG457: Advanced RS/GIS (winter 18/19)

GEOG499/440: Independent Study / Internship -any term

GIS Minor:

5 geomatics courses + two CPSC = 21 credits

= GEOG205, 300, 432

(Cartography, GIS, remote sensing)

+ two of GEOG204, 413, 457, ENPL303

+ two CPSC courses (or three)

Projects output

Design:

Letter (8.5 x 11") or Tabloid (11 x 17")

Tabloid landscape is perhaps optimum

Send as attachment to Lab TA- pdf or jpg

Along with text description (word or pdf)

Print: We will print ... you can pre-print a copy to check output if you wish

Second exam (15%) - Thursday 16.30

non-cumulative: Covering lectures since the last midterm

- Relief depiction; DEMs
- Figure-Ground in Cartography;
- Projects (map critique)
- Map Projections: history and digital
- Mapping history before 1975; digital mapping 1975->
- Global Positioning Systems (GPS) / GNSS
- Mountain / planetary mapping

Multiple choice + Map critique

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

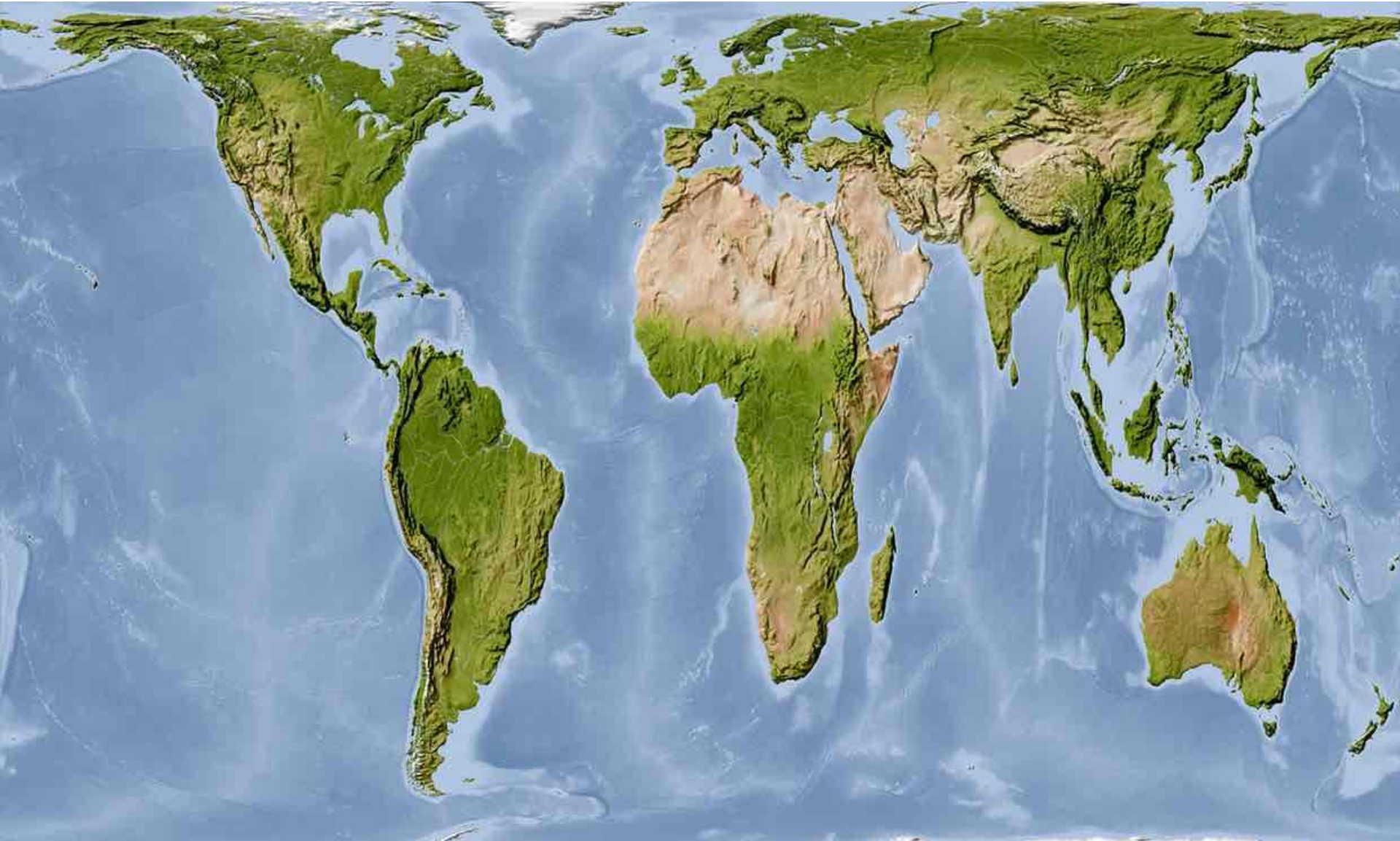
- a. The Romans
- b. The Greeks**
- c. The Vikings
- d. Leonardo Da Vinci
- e. Gerhard Mercator

Q: Explain the difference between the terms Cartography and Geomatics

Q: Identify four different 'errors' or poor design elements in the following map ?

Exam marks / final grades will be posted on the webpage under 'keys' tab

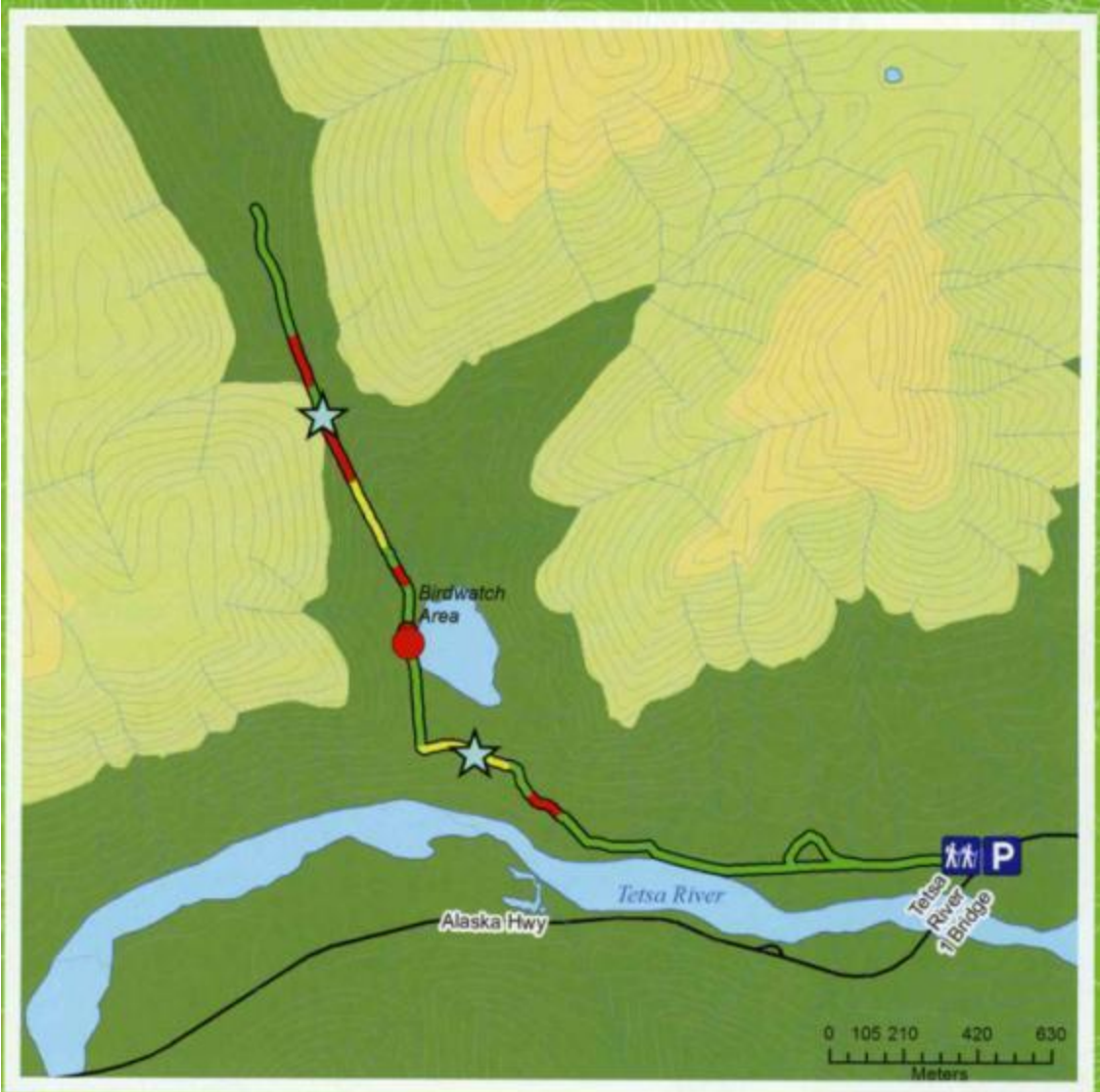
Boston public schools map switch aims to amend 500 years of distortion”



Gall-Peters projection: Is it 'more accurate' than the Mercator projection ?
Which type would be best for showing the world to schools for least distortion ?

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