

GEOG 201 – MAP INTERPRETATION & GPS

Reporting coordinates

Coordinates must be written correctly and consistently to ensure that they are both accurate and useful. The following will be the standards used in the class. **You must conform to these standards to receive full credit on quizzes, homework, and exams!**

Degrees Minutes Seconds (DMS)

- Report the latitude first, then longitude.
- Degrees should have the ° symbol after the number
- Minutes should have the ' symbol after the number
- Seconds should have the " symbol after the number
- The direction must be given after the latitude and longitude (N, E, S, W)

Decimal Degrees (DD)

- Report the latitude first, then longitude
- Coordinates south of the equator and west of the prime meridian must have a negative symbol (-)
- Round the number to five decimal places

Universal Transverse Mercator (UTM)

- Report the easting first, then northing
- Write "mE" after the easting and "mN" after the northing

Public Land Survey System (PLSS)

- PLSS coordinates must be reported from smallest to largest.
 - Give the aliquot divisions, then the section, then the township, then the range, and finally the baseline and meridian.
- For quarter sections and other aliquot divisions, give the locational reference first, then the fraction (e.g. SW ¼, N ½, etc.)
- The following abbreviations may be used:
 - The southwest quarter of the northeast quarter of section 14, township 7 north, range 13 west = SW ¼, NE ¼, Sec. 14, T. 7 N, R. 13 W

Reporting azimuth

- Azimuth is always reported with three digits, using a zero in front if the number is less than 100 and two zeroes if less than 10.
- Example: 90° should be written as 090° when reporting an azimuth