Week 4 review, Brennan Giles

**Lecture 1**

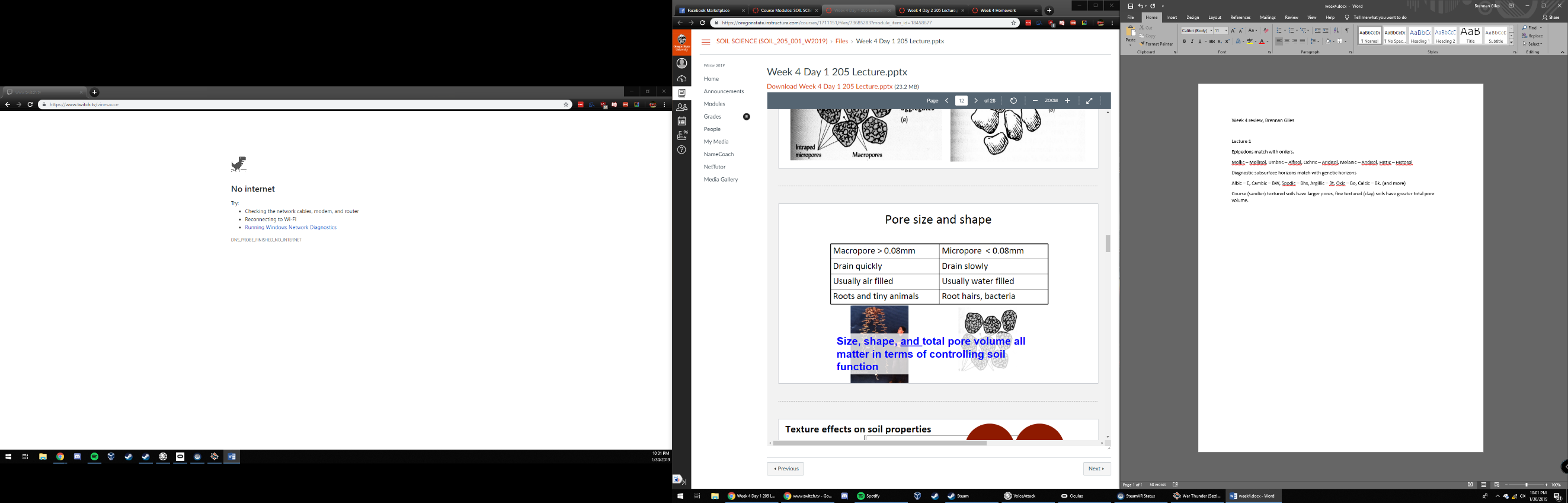
Epipedons match with orders.

Mollic – Mollisol, Umbric – Alfisol, Ochric – Aridisol, Melanic – Andisol, Histic – Histosol

Diagnostic subsurface horizons match with genetic horizons

Albic – E, Cambic – BW, Spodic – Bhs, Argillic – Bt, Oxic – Bo, Calcic – Bk. (and more)

Course (sandier) textured soils have larger pores, fine textured (clay) soils have greater total pore volume.

 Increase with bigger particle sizes: pore size, infiltration rate, drainage rate, aeration

Decrease with bigger particle sizes: surface area, total pore volume, fertility, swelling

Particle density is the mass per unit volume of mineral solids and is usually 2.65 g/cm^3

Bulk density is the mass per unit volume of the whole soil, including pore space. Porosity is the volume percentage of the void space.

%PS = 100 \* (1-(bulk Density/ 2.65))

If you compact a soil, the number of large pores decreases and the total pore volume decreases.

Bulk density tends to increase along with size of soil particles, and as bulk density goes up porosity goes down. Clay has higher porosity than sand.

**Lecture 2**

Review