

# Ancient Grains Seminar Course

(This is an interdisciplinary survey course.)

Presented by Dianna Guise, Central York High School

26 lessons/45 minutes each Middle/High School

**Objective** – Students will understand the development of agriculture and appreciate the myriad of grains and pseudo grains that feed the world today.

## Procedure:

Lesson 1 Course Introduction/Expectations/Grading

Lesson 2 Biological Classification and Phylogeny of Grasses

Lesson 3 Grassland Biome

Lesson 4 Neolithic Revolution

Lesson 5 Power and Ritual Related to Food

Lesson 6 Engineering (Historical) Related to Grains

Lesson 7 Many Ways to Cook Grains: Grain Paste to Leavened Bread

Lesson 8 Chemistry of Bread Baking

Lesson 9 Equipment, Kitchen Procedures and Food Safety

Lesson 10 Grains by Type/Breakfast Cereals

Lesson 11 through 21 Culture of (one lesson each on Wheat, Corn, Rice, Barley, Teff, Spelt, Buckwheat, Rye, Amaranth, Quinoa, Millet)

Lesson 22 Salt (and Bread)

Lesson 23 Oil (and Bread)

Lesson 24 Cheese (and Bread)

Lesson 25 Commodities Markets

Lesson 26 Grain Industry/Careers Today

## Notes:

- Use fellow content teachers as guest speakers, ex. Lesson 8/Chemistry Teacher.
- Cook or purchase food made from each grain for students to sample.

I received a grant from YCAL to purchase a grain grinder and a bread machine to use for this course. My corporate sponsor is Ardent Mills who operates two grain mills in our local area.

## References:

Brown, Elizabeth Burton. *Grains: An Illustrated History with Recipes*. Englewood Cliffs, NJ: Prentice-Hall, 1977. Print.

Tannahill, Reay. *Food in History*. New York: Crown, 1989. Print.

Toussaint-Samat, Maguelonne. *A History of Food*. Chichester, West Sussex, U.K.: Wiley-Blackwell, 2009. Print.

A screenshot of a digital resource page titled "Ancient Grains: Section 2" with a sub-header "2 - FEB 11 Biological Classification and Phylogeny of Grasses". The page features a navigation bar with "Add Materials" and "Options" buttons. Below this, there is a list of resources: "Plant Families lesson plan.docx" (250 KB), "Botany - vocabulary.docx" (140 KB), and "Guidelines on Biological Nomenclature.docx" (116 KB). There are also two links: "How Grass Grows from UC Davis" and "Class(ification) of Plants". At the bottom, there is a video player titled "Monocots v Dicots" with a thumbnail image of a plant.

