**FYS207 Earth Corps Week 7 Design (Part 1) Video Review Exercise Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Watch the class videos listed below, and answer the following review questions. Save your work, and upload answer sheet to FYS207 Canvas Course Shell in an Acrobat PDF or MS Word document format.

**Foundations of Permaculture Design (~5 min)**

<https://www.youtube.com/watch?v=todlMy_He8I&list=PLNdMkGYdEqOCvZ7qcgS3efKm26exq5E3K&index=14>

1. What is the start of the process of permaculture design?
2. List the landscape study areas that form the basis of permaculture design.
3. What is the goal of permaculture design process.
4. Provide some examples of the design elements that are included in built human systems.
5. List the five primary steps in permaculture design and implementation that forms the process in the design tree.
6. List the 16 academic disciplines that are involved in the permaculture design process.
7. List the 9 human-built products that result from the permaculture design process.
8. What is the ultimate goal of permaculture design.
9. List the 7 branches of Holmgren’s “Permaculture Flower”

**Permaculture Zones (~5 min)**

<https://www.youtube.com/watch?v=CaUlnvGhnho&list=PLNdMkGYdEqOCvZ7qcgS3efKm26exq5E3K&index=7>

1. What is the basis of the permaculture zone model.
2. Provide some examples of the core of the permaculture zone.
3. Describe the key elements of permaculture zone 1; provide examples of what is included.
4. Describe the key elements of permaculture zone 2; provide examples of what is included.
5. Describe the key elements of permaculture zone 3; provide examples of what is included.
6. Describe the key elements of permaculture zone 4; provide examples of what is included.
7. Describe the key elements of permaculture zone 5; provide examples of what is included.
8. Compare zone 1, 2, 3, 4 and 5 in terms of how often each area is visited and maintained.
9. How is zone 5 used to inform design and activities conducted in Zone 1-2-3-4?
10. True or False: all zones must form a circular bullseye type pattern.
11. Provide two examples of how products and waste from one zone can be used to strengthen another zone.

**Permaculture Design by Sectors** **[~9 min]**

<https://www.youtube.com/watch?v=233GgYhtoGs&list=PLNdMkGYdEqOCvZ7qcgS3efKm26exq5E3K&index=2>

1. Describe and define the concept of a permaculture “sector”.
2. List the two permaculture principles that are demonstrated in the video.
3. Draw a sketch or image capture illustrating how solar radiation is used to provide energy to a house in winter time, northern hemisphere.
4. True or False: in northern hemisphere, it is a good idea to plant lots of tall trees on the south side of a house, to maximize solar exposure and heating.
5. Ture or False: in northern hemisphere, it is a good idea to plant lots of tall trees on the north side of a house, to maximize a wind break to help keep the house warm.
6. List the 4 sector forces that are provided in the Temperate Climate Zone design example.
7. How do solar energy sector forces in equatorial tropical zones compare to those in more northern temperate climate zones.
8. True or False: the sun angle in the sky is less variable throughout the seasons in equatorial regions, compared to northerly latititudes.
9. What is the response of water flow to deforestation or fire in a tropical landscape.