- Facultative: photoperiod requirement is not absolute
- Gibberellin pathway: increase in hormone level
- Autonomous pathway: depends only on nutrients to determine when to flower ٠

Lesson 6: Angiosperm reproduction

- 1. Describe the structure of a complete flower
- 2. Distinguish between microgametophytes and megahametophytes
 - Microgametophyte- male gametophyte that develops from the microspore; the pollen grain •
 - Megagametophyte: female gametophyte that develops from megaspore; the embryo
- 3. Discuss the advantages and disadvantages of self-pollinating versus outcrossing
 - Self-pollinating \rightarrow fast, energy efficient, clonal spread
 - Outcrossing \rightarrow Genetic recombination, ecologically involved (insects, birds, mammals)
- 4. List the products of double fertilization: diploid egg and triploid endosperm
- 5. Summarize the three critical events that must accompany embryo development to form a seed and the adaptive significance of the seed
 - Food supply is stored in endosperm or cotyledons •
 - Outer cell layers of ovule differentiate to form the seed coat
 - Ovary wall develops into fruit
- 6. Identify the plant structures that give rise to fruits
 - Pericarp- ovary wall, sometimes becomes fleshy or hard when developing into fruits
- Percarp- ovary wall, sometimes becomes fleshy or hard when developing into fruits
 7. List examples of vegetative reproduction in angiosperms: fragmentation, stolons/runners/hizomes, tubers, corms/bulbs, plantlets, suckers, protoplast regeneration