

**GENERAL BOTANY Lecture 22 - Life Cycle of Flowering Plants**

- I. Generalized life cycle**
  - A. Life cycle from before: cell division - growth - DNA duplication - prep. for division - division**
  - B. Sporic life cycle: alternation of generations - sporophyte (plant) & gametophyte (pollen tube or embryo sac)**
    - 1. Sporophyte (produces spores - pistil & stamen)**
    - 2. Meiosis produces microspores & megaspores**
    - 3. Some mitosis occurs - get lots of stuff including egg and sperm**
    - 4. Pollination leads to pollen tube & embryo sac**
    - 5. Double fertilization**
      - a) Egg and sperm - zygote**
      - b) Central cell and sperm - primary endosperm**
    - 6. Seed - - - - - eventually a plant and starts over again**
- II. Details of the sporic life cycle**
  - A. SEE FLOW DIAGRAM**