

2019 SP -SOCR 201-842 Syllabus

Course Description

The Seed development and Metabolism course will introduce you to the basic concepts of seed physiology necessary to understand the processes that occur during seed development, maturation, storage and germination. An understanding of these processes will help you understand why certain procedures are used for seed germination, why certain seeds do not respond to procedures used, and help you explain to a customer why their seed is of low quality. Seed composition is a critical factor in how seed store or germinate. Stage of seed development and maturity will also influence seed storability, germination and growth.

This course will explain physiological processes controlling seed development, maturation, physiological maturity, seed dormancy, storage conditions affecting seed longevity, seed germination processes and seed attributes which relate to seed vigor.

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Course Objectives

1. The student will learn about the changes that occur during seed development.
2. The student will gain knowledge about the sources of assimilates and their translocation in the developing seed.
3. The student will study the role of hormones in seed development, maturation, dormancy and germination.

4. The student will study the differences in composition of seeds of various species.
5. The student will study seed properties that indicate the seed has reached physiological maturity.
6. The student will learn about the factors affecting seed storage.

7. The student will study seed germination processes such as imbibition, breakdown and translocation of food reserves, and the utilization of reserves for seedling growth.

This is the syllabus for other section of 201 namely lo1 and 801