

NRM 211  
INTRODUCTION TO APPLIED PLANT SCIENCE (3 credits)  
Fall 2019

Schedule (this is an in-person course with two lectures and one-hour lab each week):

Lectures	Monday, Wednesday	9:15AM - 10:15AM	AHRB 183
Labs	Monday	2:15PM - 5:15 PM	AHRB 1W05

Blackboard (<https://classes.alaska.edu>) will be used for announcements, lecture notes, handouts and other relevant information.

#### Course Description

Basic principles and requirements for plant growth and development with special attention to the production and management of field and greenhouse grown crops.

#### Course Objective

To guide students to an understanding of the physiological processes controlling plant growth and development emphasizing the implications and applications for plant growth and production at high latitudes.

#### Expected Student Learning Outcomes:

Enable students to apply current scientific knowledge to effectively handle and understand plant growth under various environmental conditions, management procedures and infrastructure. Provide students with the ability to recognize and appreciate opportunities and challenges for efficient plant and crop production under northern conditions.

#### Instructor :

Dr. Meriam Karlsson, Professor of Horticulture

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Office hours: Tuesdays/Thursdays 10 am - noon, or by appointment 1W04 AHRB

#### Recommended (not required) Text

6 W H U Q 1 V, Q W U R C Y 1 W R U by James DE Black and Shelley H. Jansky, 2018  
McGraw Hill, ISBN: 9781259682742, list price new \$213.00 rent/digital \$57.75.

#### Supplemental Text

Raven

Evaluation Policy:

Grades will be based on exams, pl





M	Aug. 26	Course introduction.	p. 2-12
M	Aug. 26	Lab I: Landgrant universities and experiment stations	
W	Aug. 28	Origin of cultivated plants	p. 250-252, 448-459
M	Sept. 2	Labor Day - no class or lab	
W	Sept. 4	Plant nomenclature and systematics	p. 128, 282-297, A1-A19
M	Sept. 9	Plant cell and tissue structures	p. 30-44, 53-64
M	Sept. 9	Lab II: Greenhouses	
W	Sept. 11	Plant growth substances (hormones)	p. 191-200
M	Sept. 16	Plant growth substances (hormones)	p. 191-200
M	Sept. 16	Lab III: Start mineral nutrition experiment	