#### AGRO/HORT 8900: Advanced Discussions (2 credits)

# **Professional Skills for Plant Scientists**Spring 2017

#### INSTRUCTOR

Dr. Rex Bernardo

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#### **SCHEDULE**

The class will meet at 9:35–10:25am on Wednesdays and Fridays in 306 Borlaug Hall. The class time will comprise short lectures, small-group exercises, class discussions, and student presentations. Active participation and engagement are expected during class.

#### **GOALS**

Professors teach M.S. and Ph.D. students how to excel in their science, but professors typically fail to formally teach graduate students the leadership, management, and soft skills that they need to succeed in the workplace. This course was designed to cover what a group of U of M Applied Plant Sciences alumni said is "Stuff I wish I learned in graduate school, but that I instead had to learn the hard way in [company X]." The overall goal of this course is to help prepare graduate students for their future careers. Specific goals are to increase student awareness and improve student skills in leading people, and in managing money, time, operations, and projects.

#### **PREREQUISITE**

Permission of instructor

#### **CLASS POLICIES**

**Academic dishonesty** of any kind or degree will not be tolerated. Students are expected not only to exercise academic honesty, but also to strive for the higher standard of being beyond reproach.

**Attendance** in each session is expected and required.

**Cell phones** are not to be used in class, unless students are asked otherwise by the instructor.

**Office hours** are by appointment.

**Students with a documented disability** should see the instructor and the Disability Services office within the first three weeks of the semester to make any needed arrangements.

### REQUIRED RESOURCE

Rath, T. 2007. StrengthsFinder 2.0. Gallup Press, New York.

### **GRADING**

A–F on the basis of class attendance, level of participation and engagement in class activities, and quality of an end-of-semester reflection paper.

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# **Professional Skills for Plant Scientists**

Class	Topic
1	Life cycle of a scientist
2	Working in the industry versus academe versus nonprofit organization
3	Program resources and capacity
4	Structure of a typical plant breeding company
5	Finances: Interpreting financial statements
6	Finances: Budgeting for capital and operating expenses
7	People: How am I different from others?
8	People: Managing myself first
9	Preparing for your own job interview
10	People: Hiring, motivating, evaluating, and transitioning
11	People: Managing conflict, part 1
12	People: Managing conflict, part 2
13	Negotiation case studies
14	People: Managing your bosses
15	Building a high-functioning team
16	Effective meetings
17	Work-life balance
18	(Breathing room for catching up on any of the topics)
19	Project management
20	Publish or perish
21	Written communication
22	Effective presentations
23	Oral communication
24	Intellectual property
25	Data and databases
26	Leading and managing an academic research group (Guest presentation)
27	Leading and managing an industry research group (Guest presentation)
28	Reflection papers
29	Reflection papers
30	Course wrap-up