

CFAN 8101 (2 credits)
Professional Skills for Scientists
Spring 2019

INSTRUCTOR

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SCHEDULE AND FORMAT

The class will meet on Mondays and Wednesdays at 10:40-11:30am 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. Guest lecturers will represent different employers (academe, industry, and non-profit organization), career stages, and CFANS disciplines.

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 former U of M graduate students 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

Enrolment in an M.S. or Ph.D. program, preferably in a field related to food, agriculture, or natural resource sciences

REQUIRED RESOURCE

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

CLASS PAPER AND GRADING

Each student will develop and write an end-of-semester reflection paper. Grading will be on an S–N basis, with the grade assigned according to class attendance, level of participation and engagement in class activities, and quality of the reflection paper.

CLASS POLICIES (see footnotes for links to official university policies)

Academic dishonesty of any kind or degree will not be tolerated^{1,2,3}. You are expected not only to exercise academic honesty, but also to strive for the higher standard of being beyond reproach.

Academic freedom is embraced in the course⁴. This means you are free to reasonably disagree with what the instructor teaches and to reserve judgment about disputable matters, but you remain responsible for learning the course content.

Attendance in each class session is required. If you have a legitimate reason for an absence (e.g., illness, jury duty, family emergency, religious observances, etc.), please inform the instructor prior to the your absence (if possible) or as soon as possible thereafter⁵.

Discrimination of any kind or degree will not be tolerated⁶. We respect and honor differences in race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, and gender expression.

Office hours are normally by appointment, but do come by the instructor's office at your convenience to see if he is available.

Personal electronic devices hinder learning and are not to be used in class, unless you are asked otherwise by the instructor⁷.

Sexual harassment of any kind or degree will not be tolerated⁸.

Student conduct is to be of the highest standard¹. You are expected to unconditionally treat others well. The instructor commits to do the same.

Students with a documented disability should inform the Disability Resource Center to make any needed arrangements, and inform the instructor within the first three weeks of the semester to ensure that disability accommodations can be made⁹.

Students struggling through mental health and stress issues must seek personal and professional help from multiple support systems—family, friends, University resources¹⁰, and counselors. Know that you are not alone.

¹ http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf

² <http://policy.umn.edu/education/instructorresp>

³ <https://communitystandards.umn.edu/avoid-violations/avoiding-scholastic-dishonesty>

⁴ <https://policy.umn.edu/education/syllabusrequirements-appa>

⁵ <http://policy.umn.edu/education/makeupwork>

⁶ http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity_Diversity_EO_AA.pdf

⁷ <http://policy.umn.edu/education/studentresp>

⁸

https://regents.umn.edu/sites/regents.umn.edu/files/policies/Sexual_Harassment_Sexual_Assault_Stalking_Relationship_Violence.pdf

⁹ <https://diversity.umn.edu/disability/>

¹⁰ <http://www.mentalhealth.umn.edu>

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Class	Topic
Jan 23	Syllabus; Life cycle of a scientist
Jan 28	Working in the industry versus academe versus nonprofit organization
Jan 30	Structure of a typical research company
Feb 4	Program resources and capacity
Feb 6	Finances: Interpreting financial statements
Feb 11	Finances: Budgeting for capital and operating expenses
Feb 13	People: StrengthsFinder
Feb 18	People: Generational differences
Feb 20	People: Cultural differences and awareness
Feb 25	People: Managing myself first
Feb 27	Preparing for your own job interview
Mar 4	Guest instructor: Working for a non-profit organization (Lissa Pawlisch)
Mar 6	People: Hiring, motivating, evaluating, and transitioning
Mar 11	People: Managing conflict, part 1
Mar 13	People: Managing conflict, part 2
Mar 18	<i>(Spring break)</i>
Mar 20	<i>(Spring break)</i>
Mar 25	People: Managing your bosses
Mar 27	Guest instructor: Starting out with a tenure-track position (Cory Hirsch)
Apr 1	Building a high-functioning team
Apr 3	Work-life balance
Apr 8	Effective meetings
Apr 10	Project management
Apr 15	Guest instructor: Transitioning from graduate school to an industry job (Emily Ziemke)
Apr 17	Effective communication
Apr 22	Publish or perish
Apr 24	Written communication
Apr 29	Effective presentations
May 1	Intellectual property
May 6	Banana split party and course wrap-up