

AGRO 1921 (2 credits)  
**Coffee from the Ground Up**  
Freshman Seminar

**INSTRUCTOR**

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**SCHEDULE AND FORMAT**

We will meet in person on Mondays at 1:55–3:35pm at Plant Growth Facility Room 140B. The class time will comprise short lectures, class discussions, small-group exercises on brewing coffee, and student presentations. Active participation and engagement—including tasting coffee!—are expected. Office hours are on Thursdays at 12:00–1:30pm, or by appointment.

**COURSE DESCRIPTION**

This freshman seminar is all about coffee: its history, geography, biology, breeding, production, processing, economics, sustainability, and brewing. Through team exercises, students will discover how measurable qualities of a cup of coffee are influenced by factors such as species, type of roast, grind size, brew ratio, temperature, and brewing method. The class will culminate with a team competition judged by a panel. Students will develop skills in oral and written expression, working with others, and solving problems in a manner that combines science and art. Overall, the course will help students discover and appreciate how something that seems so simple is the product of a creative and complex process.

**PREREQUISITE**

FRFY, Freshman Full Year Registration

**STUDENT LEARNING OUTCOMES**

AGRO 1921 contributes to the following student learning outcomes of the University:

1. *Identify, define, and solve problems* by identifying, empirically comparing, and choosing a set of coffee-ground and brewing variables to improve coffee quality;
2. *Locate and critically evaluate information* by synthesizing information from different sources into a short term-paper on how coffee is affected by a chosen contemporary issue;
3. *Communicate effectively* through reflection papers, a short-term paper, a team report on brewing experiments, and a video review of a local coffee place chosen by the student; and
4. *Understand the role of creativity, innovation, discovery, and expression across disciplines* by appreciating the process of coffee, from planted seed to cup.

## REFERENCES

There is no required textbook for the course, but the following are useful references:

1. Hoffman, James (2018) *World Atlas of Coffee*. 2nd ed. Firefly Books, Buffalo, NY.
2. Ristenpart, William and Tonya Kuhl (2021) *The Design of Coffee: An Engineering Approach*. Ristenhart / Kuhl Publishing, Davis, CA.
3. *Perfect Daily Grind* | <https://perfectdailygrind.com/>

## GRADING

No exams will be given, and grades will be determined from two reflection papers (1–2 pages each), a short term-paper (at least 1500 words), a team report from brewing experiments, a video review of a local coffee place, and class participation:

Points	Class requirement	Due date
10	Initial reflection paper: <i>Coffee and Me</i>	Monday of week 3
20	Short term-paper: <i>Coffee in Changing Times*</i>	Monday of week 9
10	Video review of a local coffee place	Week 14, during class
20	Team report from brewing experiments	Monday of week 13
20	Final reflection paper: <i>What I Learned in AGRO 1921</i>	Final exam week
20	Class participation	
Total = 100		

\* Short term-paper will focus on how some aspect of coffee is affected by one contemporary issue, such as climate change, emerging pests and diseases, supply-chain disruptions, pandemics, genomics advances, growing world population, labor supply, immigration, etc.

The points-based grading scale is as follows:

A	93 to 100	C+	77 to 79	F	62 or less
A–	90 to 92	C	73 to 76		
B+	87 to 89	C–	70 to 72		
B	83 to 86	D+	67 to 69		
B–	80 to 82	D	63 to 66		

Extra credit opportunities to improve one's grade are unavailable.

Late work will result in a 10% penalty in points (e.g., maximum possible score of 9 instead of 10 for the reflection paper, and 18 instead of 20 for the short-term paper), unless a valid reason is given for missing a deadline.

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

**Academic dishonesty** of any kind or degree will not be tolerated<sup>1,2,3</sup>. 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 course<sup>4</sup>. 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 thereafter<sup>5</sup>.

**Discrimination** of any kind or degree will not be tolerated<sup>6</sup>. 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 on Thursdays at 12:00-1:30pm or by appointment, but do come by the instructor's office at any time to see if he is available.

**Personal electronic devices** can hinder learning and are not to be used in class, unless you are asked otherwise by the instructor<sup>7</sup>.

**Sexual harassment** of any kind or degree will not be tolerated<sup>8</sup>.

**Student conduct** is to be of the highest standard<sup>1</sup>. 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 made<sup>9</sup>.

**Students struggling through mental health and stress issues** must seek personal and professional help from multiple support systems—family, friends, University resources<sup>10</sup>, and counselors. Know that you are not alone.

<sup>1</sup> [http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student\\_Conduct\\_Code.pdf](http://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf)

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

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

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

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

<sup>6</sup> [http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity\\_Diversity\\_EO\\_AA.pdf](http://regents.umn.edu/sites/regents.umn.edu/files/policies/Equity_Diversity_EO_AA.pdf)

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

<sup>8</sup>

[https://regents.umn.edu/sites/regents.umn.edu/files/policies/Sexual\\_Harassment\\_Sexual\\_Assault\\_Stalking\\_Relationship\\_Violence.pdf](https://regents.umn.edu/sites/regents.umn.edu/files/policies/Sexual_Harassment_Sexual_Assault_Stalking_Relationship_Violence.pdf)

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

<sup>10</sup> <http://www.mentalhealth.umn.edu>

# AGRO 1921: Coffee from the Ground Up

## Fall 2023

Week	Date	Topic
		<b>Part I: All about coffee</b>
1	Sept 11	Syllabus; introduction; different methods of brewing coffee
2	Sept 18	History, culture, and geography of coffee
3	Sept 25	The coffee plant; characteristics of different species of coffee
4	Oct 2	How coffee is grown, harvested, processed, and roasted
5	Oct 9	From a farm to your cup; diseases, economics, and sustainability of coffee
6	Oct 16	Basics of breeding coffee
7	Oct 23	Guest discussion by local coffee experts
		<b>Part II: Brewing coffee you and others like</b>
8	Oct 30	Safety; working in teams; total dissolved solids and acidity of coffee
9	Nov 6	Brewing method, water temperature, and length of steeping
10	Nov 13	Type of roast, size of grinds, and brewing ratio
11	Nov 20	Coffee design, session 1
12	Nov 27	Coffee design, session 2
13	Dec 4	Panel judging
14	Dec 11	Video reports and course wrap-up