COURSE INFORMATION

Course Title	Course Code Number	Credit Value
Agroecology III- Synthesis and Application	APBI 460	3

CONTACTS

Course Instructor	Contact Details	Office Location	Office Hours
Andrew Riseman	andrew.riseman@ubc.ca	Macmillan 323	By appointment

COURSE STRUCTURE

This is the third and final course in the Food & Environment core series. This capstone experience in agroecology focuses on applying your agroecological and sustainability knowledge in the synthesis of meaningful solutions for real-world problems in sustainable food systems. Students will act as consultants for an agricultural or other food system enterprise to help the client move closer to achieving their sustainability goals. The aim of the course is to further enhance your abilities to effectively use the knowledge and analytical skills you acquired in your previous courses towards actually helping people, either by helping define goals more clearly, helping gather information/data to better inform decisions, or building something that moves them in a more sustainable direction.

Throughout this course, we will further refine your abilities to think critically and skills associated with critical thought. I have included an introduction to Critical Thought within this document. If developing stronger critical thought skills is of interest to you, I highly recommend visiting http://www.criticalthinking.org/.

APBI 460 is designed to provide students with a safe learning environment where moving beyond individual comfort zones is encouraged. The thought process underlying the intended outcome is more important than the intended outcome's perceived 'success'.

This course has also been pre-approved by the BC Institute of Agrologists (BCIA) for those applying as registrants. For more information about the Practice of Agrology, how to apply as a registrant, or the full list of approved courses, consult the BCIA website. If you wish to become a student member, please check the student member program and complete an application.

Students will use Canvas for discussions, assignments and announcements.

SCHEDULE OF TOPICS

Week	Date	Discussion Topic
1	**Sept 2**	**Imagine day (no class)**
	Sept 4	Review of course plan and Introductions
2	**Sept 9**	Discussion of course's connection to agroecology / sustainable food systems and possible ways to increase 'sustainably' Thought exercise: Defining 'sustainability' for this course Introduce Critical Thinking Assignment: Topic: What is one issue in achieving a 'sustainable' food system that you believe you can positively affect?
	Sept 11	Operationalizing 'sustainability' Open discussion on Finding a 'Client'
3	**Sept 16**	Guest Lecture: Diplomacy in Careers
	Sept 18	Debrief Diplomacy Talk Connecting with a client
4	**Sept 23**	Discussion: Introduction to Design Thinking Discuss Article: Empathising, defining and ideating with the farming community to develop a geotagged photo app for smart devices_ A design thinking approach.
	Sept 25	Step 1: Empathy-Knowing your client
5	**Sept 30**	Practice Empathy Mapping: One Straw Society
	Oct 2	Review Practice Empathy Maps
6	**Oct 7**	Review Practice Empathy Maps

	Oct 9	
7	**Oct 14**	Step 2: Definition-Defining the problem
	Oct 16	Step 3: Ideation-Envisioning a solution
8	**Oct 21**	Pre-proposal Problem Definition and Ideations Presentations
	Oct 23	Pre-proposal Problem Definition and Ideations Presentations
9	**Oct 28**	Pre-proposal Problem Definition and Ideations Presentations
	Oct 30	Pre-proposal Problem Definition and Ideations Presentations Final Project Topics due
10	**Nov 4**	Catchup Day
	Nov 6	Catchup Day
11	**Nov 11**	**Fall Break (no class)**
	Nov 13	Weekly updates and discussion
12	**Nov 18**	Weekly updates and discussion
	Nov 20	Field work
13	**Nov 25**	Final Presentations on Deliverable
	Nov 27	Final Presentations on Deliverable
14	**Dec 2**	Final Presentations on Deliverable
	Dec 4	Class wrap-up

LEARNING OUTCOMES

Upon successful completion of this course, the students should be able to:

- Apply the design thinking framework (i.e., empathize, define, ideate, prototype, test) in a sustainable food system context;

- Synthesise novel solutions, guided by agroecological/sustainability theory and practice, to problems within sustainable food systems;
- Demonstrate an ability to reflect on and connect hands-on (i.e., real life) experiences to theoretical learning towards developing problem solving, critical thinking, and leadership skills;
- Effectively and professionally communicate information, in both written and spoken English, using a variety of methods including writing, presenting, and small group discussions.

LEARNING ACTIVITIES

Learning activities include critical thinking writing assignment, presentations, group discussions, and a term project.

LEARNING MATERIALS

All learning materials will be provided through Canvas and include assignment instructions, grading rubrics, and resource materials.

ASSESSMENTS OF LEARNING

Students will be evaluated based on their comprehension of course material, participation, and their ability to apply this information in addressing relevant problems in agroecology.

Critical Thinking Assignment	10%
Empathy Map	10%
Pre-proposal Problem Definition and Ideation Presentation	10%
Project Proposal	20%
Final Presentation on Deliverable	20%
Final Deliverable	30%
Total	100%

Assignment policies:

Late submissions will be accepted up to three days after due date with a 5% deduction per day.

Resubmissions will be accepted up to one week after return with the opportunity to earn back up to 50% of lost marks.

ASSIGNMENTS

All assignments have complete descriptions with instructions in Canvas. All assignments are to be submitted through Canvas.

Critical Thinking Assignment

Assignment 1 (written): What is one issue in achieving a 'sustainable' food system that you believe you can positively affect?

In under 1000 words, your essay should address the topic above. It should describe the empathy you feel for the given challenge (or community) and a clear description of your engagement (past, current, or future) with it.

Empathy Map

Submit your completed Empathy Map from your client interview/meeting. It should communicate your understanding of your client's needs, attitudes, and behaviors. It should be organized into quadrants such as Says, Thinks, Feels, and Does.

Pre-proposal Problem Definition and Ideation Presentation

The pre-proposal summary presentation is intended to provide an opportunity for you to share your thoughts to date on your project. It is meant to be a concise summary of your thoughts, not a complete download of your knowledge. It should have the following components:

1) Introduction with empathy connection (i.e., context)
2) Problem definition and justification with intended connections to agroecology (i.e., why is this problem appropriate?)
3) Literature review (i.e., what information is available on other potential solutions?)
4) Ideations (i.e., your proposed solutions to the problem)
5) Gaps in knowledge (i.e., what assumptions have you made in your solutions that are not addressed by the literature?)
6) Next steps (i.e., what do you plan to do next?)

Project Proposal:

Each student will prepare a proposal that describes their project. The project should address the problem you defined and should demonstrate your understanding and use of agroecological knowledge. It should be both creative and realistic. The proposal should demonstrate your mastery of the intended learning outcomes. You may assume the reader is familiar with the subject.

Structural Sections:

1) Summary or abstract (<300 words) (10%)
2) Introduction (i.e., context, problem statement, connections to agroecology) (10%)
3) Literature Review on State of the Art in the relevant area to your problem (i.e., literature that supports your decisions) (20%)
4) Proposed Solution (30%)
    a. General description of approach and deliverable
    b. Description of requirements needed to implement your solution
    c. Proposed timeline and key milestones
5) Key Assumptions (10%)
    a. What key assumptions have I relied on for my solution?
    b. What are the implications for these assumptions if found incorrect?
6) Next steps (i.e., what needs to be done to move forward?) (10%)

Final Presentation of Deliverable
The Final Presentation will describe your completed deliverable. In this presentation, you should concentrate on the integrative aspects of the project and how it addresses the class goals set forth. The presentation should include a description or demonstration of the deliverable.

Final Deliverable
To be negotiated.

COMMUNICATION POLICY

I will primarily use Canvas announcements to communicate with you. Please turn on Canvas Alerts so you will be notified when I post a new announcement. If you have any questions that can not be answered during or after class, feel free to email me and I will reply within 24 hrs.

USE OF GENERATIVE AI TOOLS

Students are permitted to use artificial intelligence tools, including various generative AI products, to gather information, review concepts or to help produce deliverables relevant to this course. However, students are ultimately accountable for the work they submit, and any content generated or supported by an artificial intelligence tool must be cited appropriately. I welcome your use of these tools and want to learn with you about them. If used, please detail how they were engaged (i.e., prompt series) and how their outputs were used (i.e., 1st drafts, idea suggestions, etc.). Please visit CTLT for more information on AI tools and their use (https://ai.ctlt.ubc.ca).

ACADEMIC HONESTY

Academic honesty is a core value of scholarship. Cheating and plagiarism (including both presenting the work of others as your own and self-plagiarism), are serious academic offences that are taken very seriously in Land & Food Systems. By registering for courses at UBC, students have initiated a contract with the university that they will abide by the rules of the institution. It is the student's responsibility to inform themselves of the University regulations. Definitions of Academic Misconduct can be found on the following website: https://academicintegrity.ubc.ca/regulation-process/academic-misconduct/#:~:text=Academic%20misconduct%20includes%20any%20conduct,to%20gain%2C%20an%20unfair%20academic

UNIVERSITY POLICIES

UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access, including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for

religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here: https://senate.ubc.ca/policiesresources-support-student-success.

ACADEMIC ACCOMMODATION The University accommodates students with disabilities who have registered with the Centre for Accessibility (http://students.ubc.ca/about/access). Please let me know in advance, preferably within the first 2 weeks of class, if you require any accommodation on these grounds.

ACADEMIC CONCESSION During your time in this course, if you encounter medical, emotional, or personal problems that affect your attendance or performance, please notify me. You may be able to obtain academic concession from the Dean of your Faculty. For further information on academic concession, please consult Policies and Regulations in the UBC Calendar (http://www.calendar.ubc.ca/vancouver/index.cfm).

LEARNING RESOURCES Learning Commons (http://learningcommons.ubc.ca) is an online resource designed to provide UBC students with learning and study support. It is an interactive website that provides access to information on exam preparation, tutoring, on-campus learning workshops, study groups, and technical tools. The University of Northern British Columbia (UNBC) also has a number of useful learning resources available for students online. They can be found at: http://www.unbc.ca/lsc/index.html.

HEALTH & WELLNESS RESOURCES

BC Crisis Center: Non-profit, volunteer-driven organization that provides emotional support to youth, adults, and seniors in crisis in BC. Crisis line available 24/7. Website: www.crisiscentre.bc.ca| Phone: 604-872-3311

Centre for Accessibility: The Centre for Accessibility provides accommodations for UBC students living with physical or mental disabilities. Website: www.students.ubc.ca/about/access| Phone: 604-822-5844

Counselling Services at UBC: Counselling offers a variety of resources to help you maintain your mental health while in school. You may see a counsellor on an individual basis, attend group counselling, or document an illness. Website: www.students.ubc.ca/livewell/services/counselling-services| Phone: 604-822-3811

Distress Line: If you are in distress or are worried about someone in distress who may hurt themselves, call 1-800-SUICIDE 24 hours a day to connect to a BC crisis line, without a wait or busy signal.

Kaleidoscope: A confidential peer-run mental health support group that takes place on campus at least once a week. You may attend the group if you are experiencing any kind of mental health related challenges, or if you're just feeling stressed about school in general. Website: www.the-kaleidoscope.com

Mental Health Awareness Club: A club that offers opportunities to speak about mental health with others and strives to promote mental health awareness at UBC. Website: www.ubcmhac.sites.olt.ubc.ca

Student Health Services at UBC: Student health provides students with a variety of healthcare related services to help you maintain your health while studying. Access to doctors and registered nurses. Website: www.students.ubc.ca/livewell/services/student-health-service| Phone: 604- 822-7011

Wellness Centre at UBC: Speak with other UBC students about tips for managing stress, keeping healthy sleep and eating patterns, concerns about safe sex, etc. Website: www.students.ubc.ca/health/wellness-centre

LEARNING ANALYTICS

Learning analytics includes the collection and analysis of data about learners to improve teaching and learning. This course will be using Canvas so that data about your activities are captured and provided to improve the quality of my teaching and learning. In this course, I plan to use analytics data to:

- View overall class progress
- Review statistics on course content being accessed to support improvements in the course
- Track participation in discussion forums
- Assess your participation in the course

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