



## AGRI 325: Sustainable Agriculture in Guatemala

### Course Description

AGRI 325: Sustainable Agriculture in Guatemala will provide students with a unique experiential learning opportunity where they will observe and learn about community projects occurring in Guatemala, and the rural livelihoods that exist there. It seeks to complicate the idea of "sustainability" through engaging with local practitioners in ways that reveal the agricultural realities in Guatemala. This course takes a holistic view of the learner as an individual living within the global context. Learners can expect to evaluate agricultural practices, articulate problems, tensions, or issues related to farming, and reflect on their positionality within the global context.

### General information

Term and year: Spring 2025

Course pre-requisite(s): n/a

Course schedule: The course is offered in Guatemala during the first two weeks of May 2025. Dates in this syllabus are approximate.

Number of credits: 3 credit hours

### Instructor information

Name and title: Julie Major, agr., Ph.D. (she/her)

Senior Faculty Lecturer, Academic Advisor

E-mail: [julie.major@mcgill.ca](mailto:julie.major@mcgill.ca)

Office location/ office hours: Macdonald-Stewart building, room MS2-083, Faculty of Agricultural and Environmental Sciences

Communication plan:

Dr. Major will be available before during and after the scheduled travel dates to meet with students. To book a meeting with Dr. Major, click [here](#).

A second staff member will be accompanying us on our trip to Guatemala. This staff member is TBD.

### Learning outcomes

By the end of this course, students will be able to:

- 1) demonstrate self-reflection by positioning themselves in relation to local and global contexts
- 2) observe and discuss the sustainability of agri-food and environmental projects/ businesses in Guatemala through group discussions and assignments
- 3) make connections between agri-food and environmental projects/ businesses and the social, economic, and environmental landscape of Guatemala
- 4) articulate problems, tensions, or issues related to agri-food and environmental projects and pose questions that complicate the meaning of 'sustainability'

### Instructional methods

This course takes place in Guatemala and uses field learning as its main instructional method. In addition to field learning, this course uses a global citizenship lens, departing from the idea that we have a membership in a world community, in addition to our local one(s). This means that to respect the humanity of others you must “regard them as active beings, as the authors of their own thoughts and choices” (Korsgaard, 1996 as cited in Kornelsen, 2014) instead of as objects of knowledge (Kornelsen, 2014, p.24). In this course, consideration for learners as whole people is applied to the learning process.

Source: Kornelsen, L. (2014). *Stories of Transformation: Memories of a Global Citizenship Practicum*. International Centre for Innovation in Education.

### This course includes:

- Field visits, individual and group assignments, and discussions
  - Field trips and talks given by local practitioners will demonstrate, illustrate, and expand upon concepts presented in course readings and our predeparture meeting
  - Students will be in direct contact with field practitioners, agrologists, extension agents, and scientists involved in sustainable agriculture
  - Student-led group discussions that relate field experiences with each other, course materials, and lived experience
  - Group projects that allow students to focus on a particular issue or agricultural practice in relationship to sustainability
- Course information and documents can be found on myCourses
- Assignments (except for the group discussions and group project) will be submitted through myCourses
- Flexible assignment formats
- Video submissions (if chosen) to be uploaded through Stream

Students can download the myCourses [Pulse mobile app](#) to stay connected to myCourses while in the field.

**Commented [JF1]:** Demonstrated through Assignment 1. Written with intrapersonal, and systems thinking competencies in mind.

**Commented [SL2R1]:** Thanks for these annotations, they're really helpful!

**Commented [JF3]:** Demonstrated through group discussions, Assignment 2, Assignment 3, and field visits. Written with interpersonal competence as well as environmental sustainability in mind.

**Commented [JF4]:** Demonstrated through Assignment 2, Assignment 3, and Group Discussions. Written with systems thinking in mind.

**Commented [JF5]:** Demonstrated through Assignment 1, Assignment 2, and group discussions. Written with environmental, social, and economic sustainability in mind.

**Commented [SL6R5]:** I really like this outcome in that it asks students to complicate the meaning of sustainability.

**Commented [JF7]:** Value statement that briefly explains the point(s) of view this course takes.

This statement demonstrates some of the interdisciplinary nature of this course, as we have combined an applied agricultural instructional method (field learning), with a philosophical one (global citizenship).

We were inspired by our peers to incorporate the whole person approach to ensure learners were being considered as complex agents who are likely to have many emotions associated with their learning. We thought this went well with the global citizenship approach.

**Commented [SL8]:** Vanessa Andreotti's HEADSUP Framework could be a helpful resource!



## Expectations:

### Students are expected to:

- Read the syllabus prior to the pre-departure meeting
- Read assigned group project readings prior to the pre-departure meeting
- Read all assignment instructions/ requirements prior to the pre-departure meeting
- Take notes while in the field to aid them in successfully completing their assignments
- Actively participate in group discussions and activities
- Respectfully and curiously engage in discussion with the group and with local practitioners
- Communicate with the instructor(s) when they have questions/ concerns
- Take opportunities to rest during allotted periods in the field

### Students can expect instructor(s) to:

- Be available before, and after departure as well as in the field to answer questions or concerns about the course
- Translate from Spanish to English during the field course
- Respectfully and curiously engage in discussion with the group and with local practitioners
- Communicate their strengths and weaknesses, or where their knowledge is limited
- Be a learner as well as a teacher
- Support one another, as well as students to ensure a smooth-running field learning experience

## Required course materials

All course materials will be provided through or during site visits, as well as through myCourses or the McGill Library. Please note that you are expected to pay attention and notice the 'in between' moments during our time in Guatemala. This means students are expected to take note of how sustainability topics and concepts may be apparent in the everyday context (i.e. what you see on the street, while in transit, or in relationship to yourself and your experiences with sustainability). Not only is this valuable for your own learning, but it may also be used to complete assignments. It is encouraged that students take notes and keep record of their learning while in the field as to be prepared to complete course assignments.

## Course content

The purpose of this course is to introduce students to a broad overview of sustainable agricultural methods and concepts. Students are expected to think about how these methods and concepts relate to environmental, social, and economic forms of sustainability. See myCourses for resources relating to these three Pillars of Sustainability.

**Commented [SL9]:** We hope that students understand what this means, but will it be spelled out somewhere what respectful and curious engagement looks like? Perhaps through role play or some other means at the pre-departure meeting?

**Commented [JF10]:** We added these student expectations to make clear to students what was expected of them and what would likely result in their success in the course.

We added the instructor expectations to ensure students were aware of instructors obligations and limits.

We are hoping making these expectations explicit (they may grow and change) will integrate interpersonal and intrapersonal competence, particularly around social sustainability and communication.

**Commented [SL11R10]:** These are really helpful to have. I'm sure students will appreciate them!

**Commented [JF12]:** Integration of the three pillars of sustainability into how students are thinking about the course through explicit instructions and course purpose.



### Preliminary Itinerary

A detailed itinerary will be provided to students at the pre-departure meeting

| Date                 | Description                           | Course Materials  | Recommended Actions   | Assignments due  |
|----------------------|---------------------------------------|---|---|--|
| TBD                  | Pre-departure meeting                 | Detailed itinerary and packing list to be provided                          | Read and review the syllabus, and all assignments<br><br>Read the texts associated with your assigned group topic | -  |
| ~ May 2nd, 2025      | Depart for Guatemala                  | -   | -   | Assignment 1: Reflection and Positionality Assignment, Part 1 due by today               |
| ~ May 2nd-13th, 2025 | Field course in Guatemala             | Field visits  | Take notes on field visits, your observations, 'in between moments', thoughts, and feelings                       | -  |
| ~ May 12th, 2025     | Group Project presentations           | Group assignment readings, field visits, notes you've taken during the trip | -   | Assignment 2: Making Connections to Sustainable Agriculture (Group Assignment) due today |
| ~ May 14th, 2025     | Field course ends; return to Montreal | -   | -   | -  |



|                                |                                 |   |   |  |
|--------------------------------|---------------------------------|---|---|--|
| ~ June 15 <sup>th</sup> , 2025 | Final day to submit assignments | - | - | <p>Assignment 1: Reflection and Positionality Assignment, Part 2 due by today</p> <p>Assignment 3: Final Assignment due by today</p> |
|--------------------------------|---------------------------------|---|---|--|

### Evaluation

The goal of all course deliverables is to promote active and critical observation in the field, to encourage students to interact with the practitioners and other Guatemalans we meet during the trip, and to reflect upon themselves as an individual living in the global context.

#### Means of evaluation to be used in the course:

- Students will be graded on three main assignments, as well as on their participation in group discussions in the field
- Assignment descriptions below, rubrics will be distributed through myCourses

Electronic assignments should be submitted via myCourses. For questions about electronic submission see [FAQs for students using myCourses: Assignments](#).

| Name of assignment  | Due date                     | % of final grade |
|---|------------------------------|------------------|
| <b>Group Discussions in the Field</b>   | Ongoing while in the field   | 10%              |
| <b>Assignment 1: Reflection and Positionality Assignment, Part 1</b>                  | ~May 2 <sup>nd</sup>         | 15%              |
| <b>Assignment 1: Reflection and Positionality Assignment, Part 2</b>                  | ~June 15 <sup>th</sup>       | 15%              |
| <b>Assignment 2: Making Connections to Sustainable Agriculture (Group Assignment)</b> | Second last day in the field | 30%              |



|                                |                        |     |
|--------------------------------|------------------------|-----|
| Assignment 3: Final Assignment | ~June 15 <sup>th</sup> | 30% |
|--------------------------------|------------------------|-----|

### Assignment Descriptions:

#### Group Discussions in the Field (10%)

Group discussions will take place ongoingly throughout our time in Guatemala. These will happen during field trips, as well as during debriefs. Students are encouraged to take notes and ask questions during discussion periods.

**Commented [JF13]:** Assessed through performance observation

**Commented [SL14R13]:** Will the instructor be the only one conducting the performance observations?

#### Assignment 1: Reflection and Positionality Assignment (2 parts, 30% total)

While learning about a (potentially) new place and people, it is also important to reflect on yourself. This is a 2-part assignment. Part 1 will be completed and handed in prior to our departure, and Part 2 will be completed and handed in after our return.

**Commented [JF15]:** Assessed through reflective writing

#### Part 1 (15%):

- Word count: 500-750 words
- Due date: May 2<sup>nd</sup>, 2025

Reflect on who you are, and how you position yourself in the world. Questions you may use to prompt your thinking include (but are not limited to):

- “Who I am, where do I come from, and where am I going?”- Ka’nahsohon (Kevin) Deer, Kanien’kehá:ka (Mohawk) Faith Keeper from Kahnawake (Full video on Environment and Sustainability [here](#))
- Who/ what has most shaped you?
- What groups or communities of people are most important to you/ do you belong to?
- What events— locally, regionally, or around the world have shaped your life?
- Who are you accountable to? Who is accountable to you?
- How do you see yourself connected to sustainability?
- What do you already know about agriculture in Guatemala?

**Commented [JF16]:** Intrapersonal competence is exercised through this assignment. We took inspiration from Kevin Deer to incorporate a local, Mohawk sustainability perspective, from a Global Citizenship (stoic) Concentric Rings activity, from the River of Life activity, and added our own questions to get students thinking about their positionally, priming them for a systems and futures thinking based reflection in Part 2. Social sustainability was considered when creating this assignment.

**Commented [SL17]:** in regards to...?

You may include reflections on positionality and identity as you feel comfortable. You may choose to complete this assignment through alternative mediums, such as video or audio recording, drawing, or another illustrative medium. If completing a written assignment, you may choose to accompany your



written assignment with drawings or illustrations. Please consult Dr. Major prior to completing the assignment if you are interested in doing it through an alternative medium (i.e. not solely written).

You may use this assignment purely as a reflection or use outside knowledge (i.e. course readings, outside authors, scholars, or thought leaders, etc.) to situate your thinking and reflection. An assignment rubric will be provided on myCourses. **All sources must be cited and consistent with APA citation style.**

**Part 2 (15%):**

- Length: 750-1000 words
- Due Date: Due by June 15<sup>th</sup>, 2025 (It is recommended you complete this assignment after you have completed Assignment 3)

Reflect again on who you are and how you position yourself in the world. Has your understanding of yourself shifted or changed since or because of our learning in Guatemala? How/ why or how/ why not? Questions you may use to prompt your thinking include (but are not limited to):

- Reflect on the information you had access to through course texts/ resources (including information delivered during our pre-departure meeting). How does this information differ from or confirm what you experienced in the field?
- What have you learned during the course that has changed how you see your connection to or understanding of sustainability?
- What events locally, regionally, or around the world shape your life? What events may shape the lives of others? What are the connections between these events and the ways they shape lives?
- We have seen a variety of agricultural operations that involve or are implicated in peoples' livelihoods. In what way(s) is agriculture implicated in your livelihood?
- What sustainable solutions or futures do you envision or propose based on your learning?

You may include reflections on positionality and identity as you feel comfortable. It is highly encouraged that you reference both instances experienced in the field (day and place) and cite course materials in your reflection. You may choose to complete this assignment through alternative mediums, such as video or audio recording, drawing, or another illustrative medium. If completing a written assignment, you may include photos or images you took during the course or choose to accompany your written assignment with drawings or illustrations. Please consult Dr. Major prior to completing the assignment if you are interested in doing it through an alternative medium. An Assignment rubric will be provided on myCourses. **All sources must be cited and consistent with APA citation style.**

**Assignment 2: Making Connections to Sustainable Agriculture (Group Assignment) (30%)**

- Duration: 10-minute presentation with a 5-minute question and answer period
- Due date: On the second last day in the field, ~ May 12<sup>th</sup>, 2025

**Commented [JF18]:** Intrapersonal, systems thinking, and futures thinking competence is exercised through this assignment. We created reflection questions to encourage students to thinking about themselves, others, systems, and futures. While discussing sustainability solutions and futures isn't a core goal of this course, we added questions focused on solutions and futures thinking to ensure students knew they could include such reflections in their writing. This is in an attempt to avoid students ending the course having reflected and learned an abundance of new things (some potentially challenging) but not having a space to talk about what comes next, or hope.

**Commented [JF19]:** This assignment was designed to exercise interpersonal and systems thinking competencies as well as have a collective reflection component to encourage co-construction of sustainability meanings.



For this assignment, you will be assigned groups of approximately three (3) people and given a group topic prior to our departure. Using the readings for your group topic and insights and experiences from the field, you will complete an oral presentation on what your group topic contributes to discussions of sustainable agriculture broadly, ex: as it pertains to livelihood, food security, as a land management strategy, as a way to make money etc.

The purpose of this assignment is to collectively discuss what you have learned about sustainable agriculture and its relationship to social, environmental, and economic phenomena, and suggest to your audience what sustainable agriculture is/ may look like with those phenomena in mind. Reference course readings and resources as support for your understanding.

Your presentation should include:

- General understandings: What were your group members' understandings of sustainable agriculture?
- Points of convergence and divergence: Did your group members agree and/ or disagree about their understandings of sustainable agriculture?
- Topic focus: What does your group topic contribute to your understanding of sustainable agriculture?
- Tensions: What tensions exist between/ within your group topic and sustainable agriculture?
- Evidence and support: Cite course readings, resources, and experiences/ information from the field (place and date) to explain your thinking.

Group project topics:

2-3 readings for each group topic will be posted on myCourses.

1. Agricultural labor dynamics
2. Government's role in sustainable agriculture
3. Land ownership and distribution
4. Agri-food cooperatives
5. Role of women in food security
6. Adoption of sustainable agricultural practices
7. Impacts of export crop production on local ecosystems
8. Importance of foreign aid in agricultural development

Assignment 3: Final Assignment (30%)

- Due date: June 15, 2024

Question 1- Literature Search: Identify and briefly explain two (2) agricultural techniques that you observed in the field in Guatemala. Indicate at least one exact location (date and place) where you observed these being used.

**Commented [JF20]:** This assignment was designed to incorporate assessments from the original course (and Julie's other course in Panama). It exercises both technical skills relevant to the field of agricultural science, as well as systems thinking.





Some examples of techniques could include but are not limited to:

- drip irrigation
- plastic mulching
- intercropping
- agroforestry
- grafting
- micropropagation

Explain why each technique is used and provide some references (at least 2 per technique) relating to published research that has assessed the impacts or efficiency of these techniques, anywhere in the world. Briefly summarize the findings of each published article and be as quantitative as possible (e.g. yields were increased by X%, etc).

**Commented [SL21]:** and potential applications in Canada? What do we have to learn from agricultural practices from around the world?

You can access scientific content through McGill's library anywhere in the world: (<http://www.mcgill.ca/library/services/connect>). All references must be appropriately cited. Note that you must choose techniques that are different from any you have covered in your group project. Address each technique in 200 words maximum.

Criteria:

Each question must:

- Correctly locate the technique (where did you see it in the field?)
- Include two peer-reviewed references

**More on peer-reviewed articles and how to find them using McGill's Library...**

What is peer-review?

<https://libraryguides.mcgill.ca/journalpublishing/typesofreview>

How do I find peer-reviewed articles?

<https://www.mcgill.ca/library/find/articles#:~:text=You%20can%20use%20search%20using,select%20Peer%20Reviewed%20under%20Content>.

Question 2- Research questions: Based on field visits and course activities, come up with six (6) research questions. Each question must relate to a different field visit (see visits marked by an asterisk on the course itinerary). All research questions must relate to the sustainability of agro-ecosystems (Environmental, social, or economic). It must be theoretically possible to answer the questions through data collection. See below for examples of research questions and criteria for creating research questions.

Research questions should:



- Make connections across disciplines or realities
- Demonstrate curiosity about the effect of one thing on another, not just be one step removed
- Give context for thinking (in 100 words or less)
- Be testable:
  - Does the data exist to test my research question?
  - Can data be collected?
  - Could this be studied in a timely manner?
  - Is the question narrow enough to be tested?
  - Does the research question specify a population and a location?
  - Can it be defined based on one or two measures?

Examples of testable research questions:

- What is the fertilizer use efficiency, in coffee plants, of surface applied cow manure to coffee plantations on slopes in the Boquete region of Panama?
- What is the theoretical level of income of a cattle rancher in Panama's Pedasi region, if they practice a conventional pasturing system, versus apply silvopastoral management techniques?

**Commented [SL22]:** Revise these for Guatemalan context? (Maybe not - I know they're just examples!)

Submit your questions at the end of the course. There will be opportunity to discuss your questions, prior to submission, with the instructor(s).



### McGill policy statements

- Language of submission

“In accord with McGill University’s [Charter of Students’ Rights](#), students in this course have the right to submit in English or in French written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives.” (Approved by Senate on 21 January 2009)

« Conformément à [la Charte des droits de l’étudiant](#) de l’Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté, sauf dans le cas des cours dont l’un des objets est la maîtrise d’une langue. » (Énoncé approuvé par le Sénat le 21 janvier 2009)

- Academic integrity

“McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the [Code of Student Conduct and Disciplinary Procedures](#)” (Approved by Senate on 29 January 2003) (See [McGill’s guide to academic honesty](#) for more information).

« L’université McGill attache une haute importance à l’honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l’on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon [le Code de conduite de l’étudiant et procédures disciplinaires](#) » (Énoncé approuvé par le Sénat le 29 janvier 2003) (pour de plus amples renseignements, veuillez consulter le [guide pour l’honnêteté académique de McGill](#).)

- Assessment: The [University Student Assessment Policy](#) exists to ensure fair and equitable academic assessment for all students and to protect students from excessive workloads.
- Charter of Students’ Rights: Additional policies governing academic issues that affect students can be found in the [McGill Charter of Students’ Rights](#).
- Mercury course evaluations: [Mercury course evaluations](#) are one of the ways that McGill works towards maintaining and improving the quality of courses and the student’s learning experience. You will be notified by e-mail when the evaluations are available. Please note that a minimum number of responses must be received for results to be available to students.
- Sustainability: McGill has policies on sustainability, paper use, and other initiatives to promote a culture of sustainability at McGill. See the [Office of Sustainability](#).
- Wellness: Many students may face mental health challenges that can impact not only their academic success but also their ability to thrive in our campus community. Please reach out for support when you need it; [wellness resources](#) are available on campus, off campus, and online.
  - To access mental health support while outside of Quebec, access Keep.meSAFE. More



information [here](#).

- Workload management skills: If you are feeling overwhelmed by your academic work and/or would like to further develop your time and workload management skills, don't hesitate to seek support from [Student Services](#).
- **Land acknowledgement:**

McGill University (Tiohtiá:ke/Montreal) is situated on the traditional territory of the Kanien'kehà:ka, a place which has long served as a site of meeting and exchange amongst many First Nations including the Kanien'kehà:ka of the Haudenosaunee Confederacy, Huron/Wendat, Abenaki, and Anishinaabeg. We recognize and respect the Kanien'kehà:ka as the traditional custodians of the lands and waters on which we meet today.

AGRI: Sustainable Agriculture in Guatemala will take place across the country of Guatemala. 6.5 million of Guatemala's 14.9 million inhabitants (43.75%) belong to one of the 22 Maya peoples (Achi', Akateco, Awakateco, Chalchiteco, Ch'orti', Chuj, Itza', Ixil, Jacalteco, Kaqchikel, K'iche', Mam, Mopan, Poqomam, Poqomchi', Q'anjob'al, Q'eqchi', Sakapulteco, Sipakapense, Tektiteko, Tz'utujil and Uspanteko), or to the Garifuna, Xinca and Creole or Afrodescendant peoples ([source](#)).

To learn more about Indigenous groups across the world and their territories, visit: <https://native-land.ca/>

**Commented [JF23]:** We are still working on incorporating Indigenous perspectives into the course through literature, and students speak with Indigenous people in the field. While we could not find a land acknowledgement for Guatemala or its regions (and are not even sure whether they do this the way we do in Canada) this section is an attempt at extending Montreal's land acknowledgment as is done in the Canadian tradition. This will likely be revised as we do more digging.