

Agroecology and Entrepreneurship: Coffee, Chocolate, and Cannabis

Transcript name: Agro Entrep

Credits: 4

Contact Hours: 62.5 total

Lecture Hours: 31.5

Directed Field Studies: 31 (62 at 2:1 ratio)

Course Description

Chiang Mai, Thailand, is emerging as a global center for specialty coffee, artisanal chocolate, and medicinal cannabis. This program is a hands-on study of these three important crops, learning directly from farmers and local producers, and culminating in an independent field research project. In addition to seminars, we will be visiting farms and learning about shade grown coffee, cacao production, and medicinal cannabis production, as well as spending time exploring the ancient city of Chiang Mai.

The course is organized around four connected modules — Coffee, Chocolate/Cacao, Medicinal Cannabis, and the Independent Field Research Project (IFRP) — each built around classroom seminars, field studies, and direct engagement with farmers, producers, and entrepreneurs.

Module 1 – Coffee

Coffee focus: We will be looking at all the stages of coffee production, visiting coffee farms and cafes, as well as learning about roasting coffee, specialty coffee production, the business side of specialty coffee, and what makes the perfect cup of coffee.

Module 2 – Chocolate/Cacao

Chocolate focus: We will study cacao growing, processing, and fermentation. Hands-on practice through field studies of cacao farms, as well as learning about and producing artisanal small-batch chocolate and the business of running a chocolate enterprise.

Module 3 – Medicinal Cannabis

Medicinal cannabis focus: We will look at the use of cannabis in traditional medicine as well as modern applications, carry out a field study with a leading cannabis research and production program, and learn from small scale farmers and entrepreneurs. We'll also be looking at the legal challenges, cultural history, and business landscape of cannabis in Thailand.

Module 4 – Independent Field Research Project (IFRP)

Independent research focus: Building on the three crop modules, each student designs and carries out an independent field research project — either a deep dive into one specific crop (coffee, cacao, or cannabis) or a comparative look at an issue or topic common to all three (e.g. value chains, entrepreneurship models, agroecological practices, or regulation). This combines further field visits, interviews, and observation with literature review, culminating in a final presentation.

Course Objectives

The objectives for this course are to:

- Have specific knowledge of agriculture and cash crops and their ecological and social context in both upland and lowland Thailand and Southeast Asia.
- Understand the role cash crops play in small landholding farmers in Northern Thailand including a deeper understanding of the ecology and economics of coffee, cacao, and cannabis.
- Learn about the value chain in cash crop production, with an emphasis on understanding farm to consumer links, including the economics of production, processing, and consumer sales.
- Gain direct experience and/or research in the area of cash crop production, entrepreneurship, and business processes related to coffee, cacao/chocolate, and medicinal cannabis, culminating in an independent research project.

Methodology

The course will integrate course lectures and readings with group discussions and seminars. Experiential field studies will be a central component of each module, both formal and informal. A large portion of the course is based on field research and on-site study. Guest lecturers — farmers, producers, and entrepreneurs — will be part of the course to share their experiences and perspective with students. Keeping up with readings, materials presented in class, and assignments is critical for success during this course.

Grading and Assessment

Component	Details	Total
Engagement	This means participation in and out of the classroom, being an active member of the course, and being fully present and engaged in the field. This includes discussions during seminars, participating in discussions inside and outside the classroom, etc.	15
Writing	Seminar Notes (10): Notes on in-class discussion, guest speakers, and key questions to follow up on in readings and essays. Field Study Notes (15): Observations from field studies, including a daily journal during farm and site visits. Note the date and topic of each entry. Reflections (20): Four (4) short reflections during the course, due at the end of each module. Each short reflection should be about 1 page (300–500 words) and cover: • How this module's crop/topic connects to the broader themes of the course. • One specific field observation or interview from the module that stood out, and why. • A question it raises for you to explore further.	45
Independent Field Research Project (IFRP)	Each student will choose an issue related to the course to study. This should be a combination of research, observations, and analysis of a topic that the student is interested in — either a deep dive into one specific crop (coffee, cacao, or cannabis) or a comparative look at an issue or topic common to all three (e.g. value chains, entrepreneurship models, agroecological practices, or regulation). The emphasis is primarily on field observations drawing on field studies as well as independent observations. This is not a book report or literature review, but field research. Students must receive instructor approval for their chosen topic/issue. Proposal (5): The IFRP proposal is a written outline and a short presentation to the class explaining the question, how it is related to the course topic, how data will be gathered, and any potential challenges you may anticipate running into. 2 page typed as well as an in-class presentation. Due end of Module 1. Progress update (5): An update during the course on what the student has discovered about their topic so far, what further questions this raises, any challenges and how they have been overcome, as well as further information they will be looking for during Module 4. 2 page typed as well as an in-class presentation. Due end of Module 3. Final Presentation (10): On the last day of the course each student will give a 5 minute presentation on their research. Focus on clarity, field observations, interviews/discussions with community members, and analytical depth. 5–10 slides in PDF format, as well as a 1 paragraph summary of your research findings. Organization for final presentation: • What did you study/research focus? How is this related to the course topic? (1) • How did you study this, including observations and interviews? (4) • What did you learn? Findings and analysis. (8) • Further questions this raises for you. (1) • Final slide of references / interviews. (1)	20
Final Exam	Comprehensive review of course topics with an emphasis on what was learned during the field portion of the course. 5 questions. Students may use their notes but not their readers or the internet during the exam.	20
Total		100

Course Topics and Schedule

Please note: Because this is a community based program, the schedule may change based on the availability of guest speakers, community access, and more. Additional readings may be assigned during the course. Students arrive Saturday and spend Sunday in program orientation before Module 1 begins Monday. Seminars generally run 1–4 PM. Specific chapters will be assigned out of the text throughout the seminars, and will be useful during Module 4 as well.

Arrival & Orientation

Saturday: Student arrival in Chiang Mai

Sunday: Orientation to the program (full day)

MODULE 1 — COFFEE

Primary Text — *Coffee Agroecology: A new approach to understanding agricultural biodiversity, ecosystem services and sustainable development* by Ivette Perfecto and John Vandermeer, Routledge, 2015

The purpose of this module is to gain a fuller understanding of coffee as a cash crop in Thailand, including the biology and ecology of the coffee plant, farming and post-harvest processing, and the economic role for small and medium-scale farmers. This module also provides the basis to examine existing and potential sustainable and regenerative farming practices used in coffee production, and to examine coffee as a business — from farm to roastery to cafe. Students will learn about coffee through an overnight farm study, processing workshops, cafe visits, and discussions with farmers, roasters, and entrepreneurs.

Monday and Tuesday will include a Survival Thai class from 8:30–11:30 AM.

Monday — Introduction to Agroecology, Origins of Coffee

- Agroecology as an approach to food production based on the idea of a farm as an ecosystem, with an emphasis on smallholder farming and communities using agroecology to re-establish control over their food systems.
- Overview of agricultural systems in mainland Southeast Asia, contrasting lowland and upland agroecological practices in Thailand.
- Overview of the origins of coffee and key issues in coffee agroecosystem/agroforest systems.

Readings:

- Oehen, Bernadette, and Angelika Hilbeck, eds., *Feeding the People: Agroecology for Nourishing the World and Transforming the Agri-Food System*. IFOAM EU Group, Brussels, Belgium, 2015 — Transform? Or Conform and Adjust; Introduction; Chapter 1 & 2
- Gliessman, S. 2007. *Agroecology: The Ecology of Sustainable Food Systems*, 2nd ed. CRC Press — Chapter 1 & 2
- Marten, Gerald G., “Small-Scale Agriculture in Southeast Asia,” In M.A. Altieri and S. Hecht (eds.), *Agroecology and Small Farm Development* (CRC Press, 1990), p. 177–194.

Tuesday–Wednesday — Overnight Farm Study (Tepsadet/Doi Saket area)

- Travel to an upland coffee farm in the Tepsadet/Doi Saket area; overnight stay in residence with the farming community.
- The specifics of coffee agroecosystems: soil quality, forest cover, water, altitude, and shade-grown production.
- Extended time with the farming family — meals, evening discussion, and (season permitting) participation in harvest or on-site processing.

Thursday — Processing and Consumption Workshop

- Return to Chiang Mai.
- Fermentation, roasting, and coffee preparation, including practicing a variety of brewing methods.

- Coffee tasting/cupping, and how processing, roasting, and preparation decisions impact the final cup.

Friday — Coffee as a Business; Module Synthesis

- The specialty coffee value chain, from farm gate to export to roastery to cafe.
- Economics of coffee production, trade, and sales; pricing and the challenges facing small producers.
- Guest speaker(s): a local roaster or cafe owner on building a specialty coffee business.
- Cafe visits in Chiang Mai, observing how coffee businesses operate day to day.
- Synthesis discussion connecting agroecology, production, and entrepreneurship themes from the module.

IFRP PROPOSAL DUE REFLECTION #1 DUE

Saturday — Old City Chiang Mai Exploration

- Exploration of Chiang Mai's Old City: temples, the Chiang Mai City Arts and Cultural Centre (next to the Three Kings Monument), and the surrounding markets.

Sunday — Rest Day

MODULE 2 — CHOCOLATE / CACAO

Primary Text — *The True History of Chocolate*, Sophie Coe and Michael Coe, Thames and Hudson, 2019.

The purpose of this module is to gain a fuller understanding of cacao and chocolate as a cash crop in Thailand, including the biology and ecology of the cacao plant, farming and post-harvest processing, and the economic role of small and medium-scale farmers, as well as the business of small-batch and artisanal chocolate production. Students will learn about cacao through a farm day trip, a chocolate production workshop, and discussions with farmers and entrepreneurs.

Monday — History and Overview of Cacao and Chocolate

- History of cacao and chocolate and its use throughout history.
- Principles of cacao production and agriculture.
- Contrasting mass market chocolate with artisanal small-scale chocolate production.

Tuesday — Day Trip: Cacao Farm

- Field visit to a cacao farm; growing, harvest, and production of cacao and cacao pods.

Wednesday — Chocolate Production Workshop

- Roasting and preparing chocolate, from cacao bean to finished bar.
- Case study of Siamaya Chocolate, an award-winning artisanal chocolate company.
- Making chocolate bars, tasting varieties, and learning about flavor profiles and how production choices shape the final product.

Thursday — Chocolate as a Business: Artisanal Entrepreneurship

- Business models for small-batch and artisanal chocolate makers, from sourcing to branding to retail.
- Scaling challenges: quality control, supply consistency, and market positioning against mass-market chocolate.
- Guest speaker(s): a small-batch/artisanal chocolate entrepreneur.

Friday — Module Synthesis

- Market/cafe visits: chocolate shops in Chiang Mai.
- Synthesis discussion connecting cacao agroecology, production, and entrepreneurship themes from the module.

REFLECTION #2 DUE

Saturday — Cooking Class

- Thai cooking class.

Sunday — Rest Day

MODULE 3 — MEDICINAL CANNABIS

Primary Text — *Cannabis: Evolution and Ethnobotany*, Robert C. Clarke and Mark D. Merlin, University of California Press, 2013

The purpose of this module is to gain a fuller understanding of medicinal cannabis as a cash crop in Thailand, including the biology and ecology of the cannabis plant, farming and post-harvest processing, the economic role for small and medium-scale farmers, and the business and regulatory landscape entrepreneurs face in this emerging industry. Students will learn about cannabis through day-trip visits to cannabis production businesses, dispensaries, and a traditional medicine clinic, and discussions with farmers and entrepreneurs.

Monday — History of Cannabis in Thai Traditional Medicine

- The long history of medicinal cannabis in Thailand and Asia more generally.
- Cannabis as part of Thai traditional medicine.
- Key issues in growing and producing cannabis, prohibition, and legal history.

Tuesday — Day Trip: Maejo University and Private Cannabis Farm

- Morning: Maejo University's cannabis program — the largest legal medicinal cannabis production facility in Asia, and their work developing strains for medicinal use.
- Afternoon: a private cannabis farm — growing, production, and sales of medicinal cannabis in Thailand.

Wednesday — Day Trip: Dispensaries and Clinic Study

- Visit to a traditional medicine clinic using cannabis as one approach to medical issues.
- Visit to dispensaries in Chiang Mai — legal issues, consumer profiles, and challenges facing entrepreneurs.

Thursday — Cannabis as a Business: Entrepreneurship and Regulation

- Business models across the cannabis value chain: cultivation, dispensaries, CBD/wellness products.
- Legal and regulatory challenges facing cannabis entrepreneurs in Thailand, and how the industry is adapting.
- Guest speaker(s): a cannabis entrepreneur or dispensary owner.

Friday — Integration and Synthesis

- Cafe/dispensary ethnographies — students visit cafes, chocolate shops, and dispensaries throughout the city on their own, to understand the end users of the three commodity crops, how each is sold, how these businesses operate, and how a single commodity (coffee beans, cacao, or cannabis) can be processed into a variety of end products.
- Seminar integrating the broad themes and lessons learned across all three crop modules — commonalities and differences in agroecology, production, and entrepreneurship, and how this shapes the value chain from grower to final consumer.
- Student presentations previewing their proposed Independent Research topic.

REFLECTION #3 DUE

IFRP PROGRESS UPDATE DUE

Saturday — Elephants

- Ethical elephant sanctuary visit.

MODULE 4 — INDEPENDENT FIELD RESEARCH PROJECT (IFRP)

The Independent Field Research Project begins in Module 1 (Proposal due end of Module 1; Progress Update due end of Module 3) and runs as a thread underneath the whole course. A student's topic can be a deep dive into one specific crop (coffee, cacao, or cannabis) or a comparative look at an issue or topic common to all three (e.g. value chains, entrepreneurship models, agroecological practices, or regulation). Module 4 is dedicated time for students to go deeper on their individual topic — this may mean returning to a farm, cafe, dispensary, or contact from Modules 1–3 for a follow-up visit and further interviews, or visiting a new site that has emerged as relevant over the course of their research. Students are expected to work full time on their research, Monday through Friday, with some flexibility for site-specific timing (e.g. harvest days). Students keep a daily research log throughout the module.

Monday — AM: Research Workshop; PM: Begin In-Depth Field Research

AM — Research Workshop: students revisit their proposal and progress update, and refine their research question in light of what they've learned so far. Identify specific return visits (which farm, cafe, dispensary, or contact) and/or new sites needed to fill gaps, and plan logistics and interview questions.

PM — Begin In-Depth Field Research: students start their follow-up visits and/or new site visits.

Tuesday–Wednesday — In-Depth Independent Field Research (continued)

- Independent fieldwork — follow-up visits to sites from Modules 1–3, and/or new site visits, interviews, and observation related to the student's chosen topic.
- Students work individually or in small groups depending on overlapping research interests.

Thursday — Writing and Presentation Prep Day

- Dedicated time to write up findings, organize field notes and interview data, and draft the final presentation.
- Informal check-ins with instructors available for students who want feedback before Friday.

Friday — Wrap-Up and Final Presentations

- Individual final presentations on independent research: what was studied, methods used, findings and analysis, and further questions raised.
- Final Exam.
- Farewell dinner and program end.

IFRP FINAL PRESENTATION DUE REFLECTION #4 DUE

Saturday — Departure

Students may leave Thailand.

Course Policies

Attendance Policy

Students are expected to be on time and attend all classes. If you are ill or otherwise need to miss a class, please inform your instructor or teaching assistant.

Academic Integrity

Academic integrity is essential to a positive teaching and learning environment. All students enrolled in ISDSI courses are expected to complete coursework responsibilities with fairness and honesty. Failure to do so by seeking unfair advantage over others or misrepresenting someone else's work as your own can result in disciplinary action.

Extensions Policy

Students may request an extension for an assignment. The request must be communicated by email to the lead instructor and MSID coordinator, more than 1 day before the assignment is due. Extension requests on the due date, without a legitimate reason, will not be considered for review.

Late Submission Policy

A submission is labeled late when it has been submitted past the due date established in the course syllabus. This policy affects all assignments in the course. For each day late, 5% of the assignment's grade will be deducted. For 1–3 days late, the student will receive less feedback and comments than submissions on time. For 4+ days late, the student will not receive comments or feedback.

Scholastic Dishonesty

Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing an academic record; or fabricating or falsifying data, research procedures, or data analysis. Within this course, a student responsible for scholastic dishonesty can be assigned a penalty up to and including an "F" or "N" for the course. If you have any questions regarding the expectations for a specific assignment or exam, ask. Do not use AI to write your assignments.

Grading Standards

Letter grade	Score or percentage	Description
A	93–100	Achievement that is outstanding relative to the level necessary to meet course requirements.
A-	90–92	Achievement that is significantly above the level necessary to meet course requirements.
B+	87–89	Achievement that is significantly above the level necessary to meet course requirements.
B	83–86	Achievement that is significantly above the level necessary to meet course requirements.
B-	80–82	Achievement that meets the course requirements in every respect.
C+	77–79	Achievement that meets the course requirements in every respect.
C	73–76	Achievement that meets the course requirements in every respect.
C-	70–72	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
D+	67–69	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
D	60–66	Achievement that is worthy of credit even though it fails to meet fully the course requirements.
F	0–59	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an Incomplete.