Food Systems

The Graduate Certificate in Food Systems (GCFS) responds to an escalating need to empower new leaders with the capacity to create innovative solutions to pressing food and agriculture challenges. Building on UC Berkeley's strength as a multi-disciplinary pioneer in food systems studies, the Certificate in Food Systems prepares Masters and Doctoral students to think critically about the multi-level, multi-system factors that affect food production, distribution, and consumption locally, nationally, and globally. This interdisciplinary program complements students' primary fields of study by addressing the ecological, social, health, political, policy, legal, and economic dimensions of food and agriculture and providing graduates with the necessary theoretical framework and practical skills that can be applied across diverse and emerging food-systems challenges.

The GCFS is hosted by the School of Public Health, College of Natural Resources, and Goldman School of Public Policy, and administered by the Berkeley Food Institute. Students from any graduate program at UC Berkeley are eligible to complete the certificate.

Students pursuing the certificate take three courses: a required core course entitled "PH HLTH 207: Transforming Food Systems: From Agroecology to Population Health," and a minimum of two elective courses totaling a minimum of 6 units. Courses not on the electives list will be considered on a case by case basis.

We encourage students to take all certificate courses outside their primary degrees; however one course can overlap with primary degree requirements.

Any UC Berkeley graduate student in good standing (GPA of 3.0 or better) may apply. Completion of the Application for Admission Form (https://docs.google.com/forms/d/ e/1FAIpQLScC3b1o0Tpea1qZ8V4DK8ttQmDqT0Z3YIAmuzyaWpp2fToRxg/ viewform/) is required before completing the certificate core course. Applications will be considered on a rolling basis.

Complete the Application for Admission Form to plan out your certificate coursework. You are encouraged to apply prior to taking the core course, though it is not required. Applications will be considered on a rolling basis. For students in 2-year masters programs, you are encouraged to take the core course and/or at least one elective during your first year to ensure you are able to complete the certificate requirements.

This application for admission signals a student's interest in the Graduate Certificate in Food Systems, but does not guarantee that the certificate will be awarded, nor guarantee a seat in GCFS-approved courses.

The Graduate Certificate in Food Systems consists of 3 courses (totaling a minimum of 9 units), each of which must be taken for a letter grade.

- Required core course PB HLTH 207: Transforming Food Systems: From Agroecology to Population Health (3 units, taught each fall)
- Two elective courses, chosen from the list below, totaling a minimum of 6 units. Courses not on the electives list will be considered on a case by case basis, via submission of the Elective Petition Form.

We encourage students to take all certificate courses outside their primary degrees; however one course can overlap with primary degree requirements.

Core Course

PB HLTH 207 Transforming the Food System: From Agroecology to Population Health is held every fall and taught by Kristine Madsen, Professor in the Joint Medical Program/Public Health Nutrition. The course is conducted as a weekly seminar with guest lectures by UC Berkeley's preeminent food systems scholars and other experts in the field. It takes a solutions-oriented approach to addressing the pressing problems in current food systems through strategies used by the disciplines of agroecology, policy, law, public health, and business in working to improve food systems and apply their varied approaches to real-world case studies. Through weekly readings, discussions, and problem-solving sessions with Berkeley's leading food systems experts, students will gain a broad understanding of food systems and the leverage points that can be targeted to improve the health of people and the planet.

The Fall 2023 core course will be held on Thursdays, 5–8pm, for in-person instruction (pending latest public health guidelines). It will be taught by Kristen Madsen, Professor at the School of Public Health. Look for class # 30173 in the Class Schedule (https:// classes.berkeley.edu/content/2023-fall-pbhlth-207-001-sem-001/) or CalCentral's schedule of classes.

Elective Courses

The following electives count toward the Graduate Certificate in Food Systems. Note that not every course is offered on a yearly basis. Check guide.berkeley.edu for the most up to date course descriptions and class schedule.

ANTHRO 230	Special Topics in Archaeology (Food, Agriculture, and Sovereignty)	4
A,RESEC 242	Quantitative Policy Analysis (Quantitative Policy Analysis)	3
CY PLAN C256/ PB HLTH C233	Healthy Cities	3
DEVP 227	Principles of Natural Resource Management	2
ENE,RES 275	Water and Development (Water and Development)	4
ENE,RES/ESPM 290	Seminar in Energy and Resources (Agrarian Questions: Land, Labor, and Livelihoods)	4
ENGIN 283	Special Topics in Technology Innovation and Entrepreneurship (Technical Foundations for Alternative Ingredients and Foods)	3
ESPM 226	Interdisciplinary Food and Agriculture Studies	3
ESPM 230	Sociology of Agriculture	4
ESPM 235	Indigenous Environmental Studies	4
ESPM 261	Sustainability and Society	3
ESPM 268	Seminar in Range Ecology	2
ESPM 278	Range Assessment	3
ESPM 280	Seminar in Range Ecosystem Planning and Policy	3
ESPM 298	Directed Group Study (Agroecology in a Planet in Crisis - Class will meet over 4 Mondays from 9/18-10/9)	1
ETH STD 250/ ESPM 232	Research Seminar: Selected Issues and Topics (Indigenizing Cultural Heritage Management and Land Stewardship)	4
MBA 292N	Course Not Available (Food Innovation Studio – This course is by application; contact the professor for instructions.)	2

MBA 292T	Topics in Business and Social Impact (Edible Education 101 - For nonHaas students, go to Haas Online Registrar system. Go to mbarequest.haas.berkeley.edu to submit your request. Requests open in early December for spring classes).)	3
NUSCTX 260	Metabolic Bases of Human Health and Diseases Graduate Level	4
PB HLTH 206B	Food and Nutrition Policies and Programs	3
PB HLTH 206D	Programs and Policies in Global Nutrition	3
PB HLTH 207A	Public Health Aspects of Maternal and Child Nutrition	2-3
PB HLTH 209A/ MBA 292T.8	Introduction to Plant-Centric Food Systems (Plant Futures Symposium)	1
PB HLTH 209B	Plant Futures Challenge Lab	3
PB HLTH 266A	Foodborne diseases	2
PB HLTH 271G/ ESPM C282	Health Implications of Climate Change	3
PB HLTH 271J	Social Justice and Worker Health	3
PUB POL 290	Special Topics in Public Policy (The Social Safety Net, Poverty, and Income Inequality - Spring)	3
PUB POL 290	Special Topics in Public Policy (The Fight for Food Justice: Mass Movement or Consumer Culture - Fall every other year)	3-4

Elective Petitions

Students can petition for graduate courses beyond the standard elective list to count toward the certificate. Particularly 290 Special Topics and 299 Independent Study courses will be considered on a case by case basis, as topics pertain to food systems. Students must submit the Elective Petition Form (https://docs.google.com/forms/d/ e/1FAIpQLSeR391EqEyvbScKvRv3O0ucjbBuksJC72qOOdxTMfOuZCp0eQ/ viewform/) **at least one month prior** to enrolling in the proposed course. Electives proposed by the petition must be approved before taking the class.

Certificate Completion

Students submit the Certificate Completion Form (https:// docs.google.com/forms/d/e/1FAIpQLScF8Bxbo8c_O6h-k5-CkHyoutP_s2kxmH5f5oNPY54WDq9eg/viewform/?usp=sf_link) at the point that all requirements for the Graduate Certificate in Food Systems are complete. Submit this form by April 15 of your graduating year in order for the certificate to appear on your transcript. If you have certificate courses in progress during your final semester, you can indicate this on the form. Final grades will be verified prior to award of the certificate.

Completion of the GCFS will be noted in the memorandum section of the student's official transcript (not on the diploma). At the time of completion, each student receives a physical certificate signed by the deans of Berkeley Public Health, Rausser College of Natural Resources, and Goldman School of Public Policy.

If you have any questions, please contact Berkeley Food Institute at foodinstitute@berkeley.edu. (foodinstitute@berkeley.edu)

The Graduate Certificate in Food Systems provides a unique opportunity for making connections with students from across the campus with a shared interest in food systems. Typically students from ten different Berkeley degree programs participate in the core course; together they make an interdisciplinary intellectual community not typically found within students' primary degree programs.

The core course and certificate provides an integrated and structured overview of food systems such that graduates understand complex "production webs," how each aspect of these systems feeds into and depends on other aspects, and how different disciplines (ecology, business, policy, law, public health) have approached challenges in food systems. Through the certificate, students are exposed to multidisciplinary experiences and trained in analytical and applied skills. Thus, students who complete the certificate are better contributors to the multidisciplinary teams that are increasingly leading food systems changes. Further, students will be able to assess the strengths and weaknesses of various strategies (e.g., legal, political, or market-based) that they might pursue as they work to improve food systems during their careers.

Kristine Madsen (http://sph.berkeley.edu/kristine-madsen/), Associate Professor in the Joint Medical Program/Public Health Nutrition, serves as the director for the Graduate Certificate in Food Systems.