

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

<b>Course Code and Number:</b> GEOG 316		<b>Number of Credits:</b> 4 <a href="#">Course credit policy (105)</a>															
<b>Course Full Title:</b> Geography of Food II: Fermentation <b>Course Short Title:</b> Geography of Fermentation <i>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)</i>																	
<b>Faculty:</b> Faculty of Science		<b>Department (or program if no department):</b> Geography and the Environment															
<b>Calendar Description:</b> Covers the role of fermentation processes in the global food system, introducing students to historic and current uses of fermentation in culinary applications, and exploring fermented foods and beverages and their culinary geographies. Fermentation as an element of culinary knowledge, cultural geography, and economic geography will be discussed, with applications in food processing and tourism.  Note: Students with credit for GEOG 300K cannot take this course for further credit.																	
<b>Prerequisites (or NONE):</b>		45 university-level credits.															
<b>Corequisites (if applicable, or NONE):</b>		None															
<b>Pre/corequisites (if applicable, or NONE):</b>		None															
<b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i> Former course code/number: <b>GEOG 300K</b> Cross-listed with: Dual-listed with: Equivalent course(s): <i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>		<b>Special Topics</b> <i>(Double-click on boxes to select.)</i> This course is offered with different topics: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, topic will be recorded when offered.)</i>															
		<b>Independent Study</b> If offered as an Independent Study course, this course may be repeated for further credit: <i>(If yes, topic will be recorded.)</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit															
		<b>Transfer Credit</b> Transfer credit already exists: <i>(See <a href="#">bctransferguide.ca</a>.)</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Submit outline for (re)articulation: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i>															
<b>Typical Structure of Instructional Hours</b> <table border="1"> <tr> <td>Lecture/seminar hours</td> <td>40</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td></td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td>20</td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td><b>Total hours</b></td> <td><b>60</b></td> </tr> </table>		Lecture/seminar hours	40	Tutorials/workshops		Supervised laboratory hours		Experiential (field experience, practicum, internship, etc.)		Supervised online activities	20	Other contact hours:		<b>Total hours</b>	<b>60</b>	<b>Grading System</b> <input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit	
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Labs to be scheduled independent of lecture hours: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		<b>Maximum enrolment (for information only):</b> 28 <b>Expected Frequency of Course Offerings:</b> Every other year <i>(Every semester, Fall only, annually, etc.)</i>															
<b>Department / Program Head or Director:</b> Claire Hay		<b>Date approved:</b> March 2019															
<b>Faculty Council approval</b>		<b>Date approved:</b> March 15, 2019															
<b>Dean/Associate VP:</b>		<b>Date approved:</b> March 15, 2019															
<b>Campus-Wide Consultation (CWC)</b>		<b>Date of posting:</b> April 12, 2019															
<b>Undergraduate Education Committee (UEC) approval</b>		<b>Date of meeting:</b> April 26, 2019															

**Learning Outcomes:**

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

1. Critically examine geographic culinary readings including academic writings and multi-media sources.
2. Follow culinary instruction.
3. Utilize online technologies and library collections to gather food-related information from a variety of perspectives including a geographic framework.
4. Examine historical sources and assess their accuracy.
5. Use tasting methodologies for knowledge gathering.
6. Demonstrate knowledge in the area of fermentation technology and its role in the global food system from a geographic and historical perspective.
7. Propose questions in their coursework and formulate solutions reflective of the complexity of culinary geography and the geography of food.
8. Compare and contrast solutions to food system challenges in a global context.
9. Demonstrate listening, speaking and writing skills and convey intended messages both online and in the classroom including through oral presentation, tastings, and written assignments.
10. Work cooperatively to solve a culinary problem.

**Prior Learning Assessment and Recognition (PLAR)**

☒ Yes ☐ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (*Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion*)

Lectures, guest lectures, online (hybrid) instruction, demonstration and tastings, presentations

**NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.**

**Typical Text(s) and Resource Materials** (*If more space is required, download Supplemental Texts and Resource Materials form.*)

Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1. Zilber, D & Redzepi, R	The Noma Guide to Fermentation	<input checked="" type="checkbox"/>	Artisan	2018
2. Steinberg, Adam	"What we talk about when we talk about food: Using food to teach history at the Tenement Museum." The Public Historian 34.2 (2012), 79-89	<input type="checkbox"/>		2012
3. Tamang, Jyoti P., Prabir K. Sarkar, and Clifford W. Hesseltine.	"Traditional fermented foods and beverages of Darjeeling and Sikkim—a review." Journal of the Science of Food and Agriculture 44.4 (1988): 375-385.	<input type="checkbox"/>		1988
4.		<input type="checkbox"/>		
5.		<input type="checkbox"/>		

**Required Additional Supplies and Materials** (*Software, hardware, tools, specialized clothing, etc.*)

A course reading list will be assembled by the instructor. All course readings will be available online through the library database.

**Typical Evaluation Methods and Weighting**

Final exam:	%	Assignments:	45%	Field experience:	%	Portfolio:	%
Midterm exam:	15%	Project:	20%	Practicum:	%	Other:	20%
Quizzes/tests:	%	Lab work:	%	Shop work:	%	Total:	100%

**Details (if necessary):**

Assignment	Course LOs	Percent of grade
Essay assignments	1, 2, 3, 4, 5, 9	15 x 2 = 30
Practical assignment	4, 5, 6, 9, 10	15
Midterm	6, 9	15
Online activities	1, 2, 3, 4, 5, 6, 9, 10	20
Class presentation	1, 2, 3, 9	20

**Typical Course Content and Topics**Week 1:

Day 1: Introduction, the science and history of fermentation

Day 2: Understanding umami

Online discussion: Introductions on blackboard

Week 2:

Day 1: Fermented dairy products and the rise of grazing

Day 2: Fermented meat products

Reading one posted / Selection of presentation topics and dates

Week 3:

Day 1: Bread and Civilization

Day 2: Alcohol 1: The history of alcoholic beverages

Online discussion: Discussion of reading 1

Week 4:

Day 1: Vegetable ferments, kimchi, and seasonality

Day 2: Poi and the boat crops of the Pacific

Reading 2 posted

Assignment 1 due

Week 5:

Day 1: Smell and flavour, fermented vinegars and sauces

Day 2: Alcohol 2: Scotch and terroir

Online discussion: Discussion of reading 2

Week 6:

Day 1: Midterm [In Class]

Day 2: Fermentation in the tea and coffee chain

Week 7:

Day 1: Beer 1, the history of brewing

Day 2: Beer 2, the geography of microbreweries and the tasting trail

Reading 3 posted

Assignment 2 due

Week 8:

Day 1: Wine 1, the history of viticulture

Day 2: Presentations 1

Online discussion: Discussion of reading 3

Week 9:

Day 1: Wine 2, wine regions, tasting, and the modern rise of the grape

Day 2: Presentations 2

Reading 4 posted

Week 10:

Day 1: Cellular agriculture and food additive fermentation applications

Day 2: The soybean, tofu and miso and culinary cultures of China and Japan

Online discussion: Discussion of reading 4

Week 11:

Day 1: Presentations 3

Day 2: Alcohol 3: Distilled beverages, prohibition, and the cocktail revival.

Week 12:

Day 1: Apples and cider, orchard agriculture.

Day 2: Infusions and medicinal applications

Week 13:

Day 1: Presentations 4

Day 2: Rice and the production of sake, cultural capital

Some classes will have hybrid components available on blackboard.