Acknowledgement

UBC Vancouver Campus, where this course is held, is located on the traditional, ancestral, and unceded territory of the xʷməθkʷəy̓əm (Musqueam) people. The land it is situated on has always been a place of learning for the Musqueam people, who for millennia have passed on their culture, history, and traditions from one generation to the next on this site.

Course Details

Course	FNH 335 001
Prerequisites	19 years or older, 3rd-year standing; FNH 330
Term/year	2022W2 (January-April)
Lecture day/time	M/W/F 4:00-4:50 pm
Lecture location	MCML 256 (MacMillan Building)
Lab locations	Weds 5-6pm MCML 258
Instructor	Jay Martiniuk
Email	jay.martiniuk@ubc.ca (please email through Canvas instead)
Office	Room 133, MacMillan Building
Office hours	12-1 PM Wednesday or by arrangement with instructor
TAs	Erica Won
Syllabus version	Jan 11 2023

Course Instructor Biographical Statement

Lecturer in Food, Nutrition and Health in the Faculty of Land and Food Systems UBC; winemaker; MSc in Food Science at UBC Wine Research Centre

Course Structure

This course builds on viticulture and enology concepts introduced in FNH 330. FNH 335 includes a more advanced theoretical review of winemaking concepts with some practical demonstrations and assignments. This term includes a class project on wine-making (some small at-home projects are proposed also). Some coverage of common wine-making problems and wine defects faced by the wine industry will be presented. FNH 335 also covers more advanced theoretical principles of objective wine-quality assessment (note no alcohol consumption is allowed in FNH 335 labs).

Over the course of the term, we will have a review of the terroir & wines of select regions of the world (beginning with Italy, Spain, Portugal and other regions as time allows) – this will continue throughout the term except when winemaking steps with lecture updates are required. Near the end of the term, the finished class/demo wine will be reviewed (Instructor/TA). Subsequently, students either individually or in small groups (TBD depending on how the COVID 19 pandemic evolves) will submit a proposed Meritage blend of the class wine from a list of available BC VQA Meritage varietal wines. Each student will design their own wine-label for the class blend for marketing and outline/discuss their strategy in a short paper.

Lecture

The course includes three lectures weekly on Monday, Wednesday and Friday at 4:00-4:50pm. **Wine tastings may be held during lecture time, so attendance is strongly recommended.** Lectures will be

recorded on Zoom and released to students who cannot attend lecture due to illness.

Laboratory

The course includes a 1.0-hr in-person laboratory (5:00-6pm) with sensory training, winemaking demonstrations, and wine-tasting. A $35 lab fee is charged to cover cost of lab supplies and wines (+$5/glass; 3 ISO glasses are required).

Note that our wines are tasted (and then spit into a spit-cup that you provide). There will be **NO CONSUMPTION OF ALCOHOL during labs**. Failure to comply with this rule may result in failure of the lab & exclusion from further lab activities. The TA & Instructor will monitor all tastings periodically.

COVID-19
While masks are currently optional, they are highly recommended in lab and lecture. Lab and lecture structure may be subject to change as the COVID-19 pandemic evolves.

Learning Outcomes

Upon completion of this course, students will be able to

1) Outline & provide a rationale for winemaking approaches in the production of various styles of wine (focus especially on red wines)
2) Outline/explain technically the main aspects of fermentation & related processes involved in wine-making including the purposeful storage/ageing of wine (focus on red wines, but applicable to various styles of wine)
3) Objectively assess specific classes/styles of wine for attributes relating to source grapes and processing methodology including wine-ageing/orange wines.
4) Describe the specific microbes important to wine production and their management to favour the production of quality wines.
5) Describe the typical main faults that can occur in winemaking and relate them to likely causes.
6) Explore select wine regions (Old World: Spain, Italy, and Portugal (and possibly selected New World areas).

Learning Materials

Course learning materials (lab book, lecture slides, supplemental notes, aroma chart, videos, study materials for quiz/exam prep) will be available in/via Canvas. Lecture slides will be posted the day prior to lecture at the latest. Use of Canvas Discussion for Instructor & TA assistance & peer support has been shown to be helpful. A $35 lab fee to be paid by cash or cheque is charged to cover the cost of lab supplies, with an extra $15 required if students require 3 new ISO glasses.

Schedule of Topics

LECTURE OUTLINE (Tentative)
The types, order and schedule of wine topics may be adjusted depending upon lab/course progression at the discretion of the instructor.

WEEK 1-2 Lectures (Reference SEE CANVAS PDF/notes; also see lab book, announcements)

- An overview of course topics and requirements - Learning Outcomes
- Lectures/discussion: course topics, course schedule, expectations, evaluation.
- What is wine quality and how is it assessed? What are the sources of aromas - from the vineyard grapes (terpenes, norisoprenoids, methoxypyrazines), from the winery, fermentation processes (higher alcohols, ethyl esters of fatty acids, acetates) and oak barrels (vanillin, guaiacol etc.).

Lab: wine sensory and wine-making - Discussion of proposed projects. Aroma training.

WEEK 3-4 Lectures (Reference: CANVAS notes)

- How grapes grow and achieve ripeness. Pre-fermentation steps.
- A detailed look at white wine making, including some technology used to assess juice/wine attributes, yeast and microbes.

Labs: More sensory training. Wine review: TBA looking at wines spiked with aromas or with fault aromas (may be moved to the following week(s))

WEEK 4 Lectures (Reference: CANVAS notes)

- Can we make whites like red wines? About "orange" wines.

Labs: Wine fermentation monitored & steps as needed

WEEK 5-6 Lectures (Reference: CANVAS notes)

- Red winemaking overview
- Problems in winemaking; wine faults

Lab: Wine fermentation monitored & steps as needed; wine faults

WEEK 6 Lectures

- Finish wine faults & start wine aging

Lab: Wine fermentation monitored & steps as needed

- Midterm exam February 15, 2023

WEEK 7 no classes: Reading Break

WEEK 8 Lectures (Reference: CANVAS notes)

- Wines of Italy plus time for lab assignments as needed (TBD)

Lab: Wine fermentation monitored & steps as needed. Settling & racking

WEEK 9 Lectures (Reference:CANVAS notes)

- Wines of Spain plus time for lab assignments as needed (TBD)

Lab: Wine fermentation monitored & steps as needed... preliminary tasting
WEEK 10 Lectures (Reference: CANVAS notes)

- Wines of Portugal plus time for lab assignments as needed (TBD)

Lab Review of blending wines and blending, wines of Portugal

WEEK 11 Lectures (Reference: CANVAS notes)

- Wines of Australia

Lab Wines of Australia

Week 12 (Reference: CANVAS notes)

- Review of Demo winemaking and blending; aging

WEEK 13-14 Lecture (Reference: CANVAS notes)

- Summary lecture on winemaking & Final exam review, extra topics

Assessments of Learning

EVALUATION

Canvas Quizzes	10%
Midterm Exam Feb 15 2023	20 or 30% (best option*)
Assignments	10 or 20% (best option)
Lab participation	10%

20% deduction from the 10 Lab marks for each lab missed (exception for document supported illness-related absences; contact Instructor).

Final exam	40%

Note: The final exam will include information taken from & about the sensory evaluation of wine, faults and/or wine-type identification discussed in lab.

*Assignments and midterm weights will be adjusted to give the best possible mark or as requested by the student.
Note: At the Instructor's discretion, the grade distribution or deadlines may be altered on a case-by-case basis. If needed, students will be directed to advising for formal accommodations.

Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. All UBC students are expected to behave as honest and responsible members of an academic community. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work.

It is the student's obligation to learn, understand and follow the standards for academic honesty. Students must be aware that standards at the University of British Columbia may be different from those in secondary schools or at other institutions.

Violations of academic integrity lead to the breakdown of the academic enterprise, and therefore serious actions are taken. Plagiarism or cheating may result in a mark of zero on an assignment, exam, or course. More serious consequences may apply if the matter is referred to the President's Advisory Committee on Student Discipline. Academic misconduct may result in a one-year suspension from the University and a notation of academic discipline on the student's record.

The UBC library has a useful Academic Integrity website that explains what plagiarism is and how to avoid it. If a student is in any doubt as to the standard of academic honesty in a particular course or assignment, then the student must consult with the instructor as soon as possible. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar.

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 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 on **the UBC Senate website.**

Other Course Policies

Alcohol consumption in laboratory is not allowed and will result in failure of that laboratory and possible expulsion from the course.

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