ENGB 402

California State University San Marcos • NEW COURSE • FORM C

ORIGINATOR'S SECTION:

1. College:

☐ CHABSS ☐ CoBA
☐ CoEHHS X CSM

Desired Term and Year of Implementation (e.g., Fall 2008):

Spring 2018

2.Course is to be considered for G.E.? (If yes, also fill out appropriate GE form*) ☐ Yes X No

3. Course will be a variable-topics (generic) course? ☐ Yes X No
("generic" is a placeholder for topics)

4. Course abbreviation and Number:* ENGB 402

5. Title: ***(Titles using jargon, slang, copyrighted names, trade names, or any non-essential punctuation may not be used.)***

Beyond Brewing: Specialty Beverage Production

6. Abbreviated Title for PeopleSoft:
(no more than 25 characters, including spaces)
Spec Bev Production

7. Number of Units: 2

8. Catalog Description: ***(Not to exceed 80 words; language should conform to catalog copy. Please consult the catalog for models of style and format; include all necessary information regarding consent for enrollment, pre- and/or corequisites, repeated enrollment, crosslisting, as detailed below. Such information does not count toward the 80-word limit.)***

Extends topics covered in ENGB 401 with application to specialty beverage production. Introduces the history, physiology, microbiology and flavor contributions of wood to specialty beverages, and also the maintenance of wooden vessels. Explores the fundamental differences in fermentation and production of barrel-aged beer, cider, perry, and saké. Principles of distillation and its application to brandy will also be discussed. *Prerequisite: ENGB 401*

9. Why is this course being proposed?

Course is being proposed as part of Engibeering™ certificate programs through extended learning.

10. Mode of Instruction*

For definitions of the Course Classification Numbers:
http://www.csusm.edu/academic_programs/curriculumscheduling/catalogcurricula/DOCUMENTS/Curricular_Forms_Tab/Instructional%20Mode%20Conventions.pdf

Type of Instruction	Number of Credit Units	Instructional Mode (Course Classification Number)
Lecture	2	C-2
Activity		
Lab		

11. Grading Method:*
X Normal (N) *(Allows Letter Grade +/-, and Credit/No Credit)*
☐ Normal Plus Report-in-Progress (NP) *(Allows Letter Grade +/-, Credit/No Credit, and Report-in-Progress)*
☐ Credit/No Credit Only (C)
☐ Credit/No Credit or Report-in-Progress Only (CP)

12. If the (NP) or (CP) grading system was selected, please explain the need for this grade option.

13. Course Requires Consent for Enrollment? ☐ Yes ☒ No

☐ Faculty ☐ Credential Analyst ☐ Dean ☐ Program/Department - Director/Chair

14. Course Can be Taken for Credit More than Once? ☐ Yes ☒ No
If yes, how many times? (including first offering)

15. Is Course Crosslisted: ☐ Yes ☒ No

If yes, indicate which course and check "yes" in item #22 below.

16. Prerequisite(s): ☒ Yes ☐ No **ENGB 401**

17. Corequisite(s): ☐ Yes ☒ No

* If Originator is uncertain of this entry, please consult with Program/Department Director/Chair.

Tracker ___
RP ___
PS ___

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18. Documentation attached:
☐ Syllabus X Detailed Course Outline

19. If this course has been offered as a topic, please enter topic abbreviation, number, and suffix:*

20. How often will this course be offered once established?* Annually or each semester as part of Engibeering program through Extended Learning.

PROGRAM DIRECTOR/CHAIR - COLLEGE CURRICULUM COMMITTEE SECTION:
(Mandatory information – all items in this section must be completed.)

21. Does this course fulfill a requirement for any major (i.e., core course or elective for a major, majors in other departments, minors in other departments)? ☒ Yes ☐ No

If yes, please specify:
Required course in the Brewing Science Certificate.

22. Does this course impact other discipline(s)? (*If there is any uncertainty as to whether a particular discipline is affected, check "yes" and obtain signature.*) ☒ Yes ☐ No

If yes, obtain signature(s). Any objections should be stated in writing and attached to this form.

Chemistry & Biochemistry Discipline	Signature	10/17/17 Date	✓ Support	Oppose
Discipline	Signature	Date	Support	Oppose

SIGNATURES : (COLLEGE LEVEL) :

Jacqueline A. Trischman	1/4/17		
1. Originator (please print or type name)	Date		
	2/3/17		
2. Program Director/Chair	Date		
Bill Grant	10/27/17		
3. College Curriculum Committee	Date		
	10/31/17		
4. College Dean (or Designee)	Date		

(UNIVERSITY LEVEL)

5. UCC Committee Chair	Date
6. Vice President for Academic Affairs (or Designee)	Date
7. President (or Designee)	Date

Office of Academic Programs	Banner:	Catalog	Revised 3/28/2007

* If Originator is uncertain of this entry, please consult with Program/Department Director/Chair.

ENGB 402 – Beyond Brewing: Specialty Beverage Production
(PROSPECTIVE COURSE OUTLINE/SAMPLE SYLLABUS)
Spring, 2018 CN XXXXX
Date/Time: TBD Location: TBD

Instructor TBD
Email TBD
Office TBD
Best contact number TBD

Course Description: This course extends topics covered in ENGB 401 with application to specialty beverage production. Introduces the history, physiology, microbiology and flavor contributions of wood to specialty beverages, and also the maintenance of wooden vessels. Explores the fundamental differences in fermentation and production of barrel-aged beer, cider, perry, and saké. Principles of distillation and its application to brandy will also be discussed.

Student Learning Outcomes:

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

1. Explain the differences in the production of barrel-aged beer, cider, perry, and saké.
2. Relate functional group, molecular class, or microbiological process to flavors from wood.
3. Apply basic chemical concepts, such distillation, to brewing process steps.
4. Illustrate the differences in the chemistry of barrel-aged beer, cider, perry, and saké.

Prerequisites: ENGB XXX

Textbooks:

Cantwell, Dick and Peter Bouchaert. "Wood & Beer: A Brewer's Guide." Brewers Publications, 2016.

Jolicoeur, Claude. "The New Cider Maker's Handbook: A Comprehensive Guide for Craft Producers." Chelsea Green Publishing, 2013.

Auld, William G. "Brewing Sake: Release the Toji Within." CreateSpace Independent Publishing Platform. 2012.

Course Activities:

Homeworks: Approximately 8 homeworks worth 15 points each will include reading guides, activities, and review exercises.

Quizzes: Two quizzes will be included to allow demonstration of mastery of each major section of the course. These quizzes will be worth 50 points each.

Tests: Mid-term worth 100 points and final exam worth 200 points.

Project: Each student will be given a type of specialty beverage to research the process in which it is produced. Students will report on the fermentation and aging process, and also identify the origins of the flavor profile. A paper describing the proposals will satisfy the All-University Writing Requirement. Each student will also present their work to the class.

Grading Scheme:

	# of Items	Pts. Per Item	Total Points
Homework	8	15	120
Quizzes	2	50	100
Project	1	80	80
Midterm Exam	1	100	100
Final Exam	1	200	200
			600

# points	Grade
549 and up	A
540-548	A-
531-539	B+
489-530	B
480-488	B-

# points	Grade
471-479	C+
429-470	C
420-428	C-
360-419	D
Below 360	F

Students are encouraged to contact the instructor ahead of class in the event of an absence. When possible, late work will be accepted up to one week late with some deduction. (Additional info will be added by the instructor for the class)

Anticipated schedule:

Lectures	**Topics /Readings**
Week 1	Introduction: History of wooden vessels and cooperages
Week 2	Wood & Wooden Vessels Topics: Varieties of wood; Processes of harvesting; Regions
Week 3-4	Wood Maintenance Topics: Parts of the barrel; Organization & inventory; Temperature and humidity; Barrel inspection, testing, and cleaning; Sampling; Repairing. Guest lectures: Whiskey Making
Week 5-6	Flavors from Wood Topics: Review of organic compounds in wood; Seasoning, bending, toasting, and charring; Wood extraction. Guest lectures: Barrel-aging beer
Week 7	Quiz #1 on weeks 2-4 (wood basics and maintenance)

	Flavors in Wood Topics: Wood microbiology
Week 8	Blending and Culture Review exercises
Week 9	Mid-Term Exam and Discussion of Projects
Week 10	The chemistry and microbiology of hard ciders and perry
Week 11	Chemical principles of distillation: turning craft cider into brandy
Week 12-13	Quiz #2 on weeks 10-11 (distillation) The chemistry and microbiology of saké Guest lecture: Craft saké production
Week 14-15	Presentations and Review

Academic Honesty:

Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All written work and oral presentation assignments must be original work. All ideas/material that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks.

Students are responsible for honest completion of their work including examinations. There will be no tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor's attention. The instructor reserves the right to discipline any student for academic dishonesty, in accordance with the general rules and regulations of the university. Disciplinary action may include the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole."

ADA Statement:

Students with disabilities who require reasonable accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disabled Student Services (DSS). This office is located in Craven Hall 5205, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Students authorized by DSS to receive reasonable accommodations are encouraged to meet with me outside of class, e.g. during my office hours in order to ensure confidentiality.