

**University of Hawaii Maui College
CULN 150 - Fundamentals of Baking**

1. Course Alpha. Please click on the ? to the right for help.

CULN

2. Course Number. Please click on the ? to the right for help.

150

3. Course Title/Catalog Title. Please click on the ? to the right for help.

Fundamentals of Baking

4. Number of Credits. Please click on the ? to the right for help.

4

5. Contact Hours/Type. Please click on the ? to the right for help.

- Hour lecture (2)
- Hour other; explain (8)

4cr. 2 hour lect. 8 hrs. shop per week

6. Course Description. Please click on the ? to the right for help.

Studies the uses of bakery tools, equipment, materials, and recipes. Provides practical experience in working basic hotel and restaurant bakery stations. Involves quality production of bakery goods, pastries and desserts.

7. Pre-Requisites. Please click on the ? to the right for help.

Prereq: ENG 19 with grade C or better or placement at least ENG 22, and MATH 22 with grade C or better or placement at least MATH 82, or consent.

8. Co-requisites.

N/A

9. Recommended Preparation.

N/A

10. Is this a cross-listed course? Please click on the ? to the right for help.

NO

11. Reason for Proposal. Why is this course being proposed or modified? This question requires specific information as part of the explanation. Please click on the ? to the right for help.

Changing this 5 credit "Lab" course into a 4 credit "Shop" course will essentially keep the hours spent in class the same being that 1 credit = 3 hours of "lab" while 1 credit = 4 hours of "shop". Keeping this course at 5 credits would result in an increase in contact hours for the instructor resulting in necessary "overload" pay. This course is evenly based on both hands-on skill development as well as knowledge based concept delivered through lecture. Students will greatly benefit from an equal ratio of shop (2 cr.) to lecture (2 cr.) time. This change will maintain the lecture portion of this course at 2 hours while decreasing the "shop" time minimally by one hour.

CULN 150 will be moved on the program map from the 2nd semester to the 1st in order to allow culinary students to obtain a CA in Culinary Arts within a one year period (currently it takes 3 semesters). Due to this relocation, the **prerequisites for CULN 150 will be** changed to match that of CULN 123 (**ENG 19 with grade C or better or placement at least ENG 22, and Math 18 with grade C or better of placement at least Math 82, or consent**)

12. Effective Semester and Year. For new or modified courses, the effective year is one year from the semester proposed. For example, if proposed in Spring 2012, the effective semester is Spring 2013. Please click on the ? to the right for help.

Fall 2015

13. Grading Method. What grading methods may be used for this course? Please click on the ? to the right for help.

- Standard (Letter,Cr/NCr,Audit) (0)

14. Is this course repeatable for credit? How often can this course be counted toward a degree or certificate? Please click on the ? to the right for help.

15. Course Student Learning Outcomes (SLOs). DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "COURSE LEARNING OUTCOMES" and enter in that screen. Please click on the ? to the right for help.

Course SLO/Competency	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	
Identify and safely demonstrate individual culinary skills and practices necessary in the professional bakery with an emphasis on function and ID of ingredients and the different mixing methods involved in the process.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>								<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Identify, produce, and evaluate bakery products with emphasis on balancing proper flavors, seasoning, textures and using baking terminology, and pleasing visual presentation.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Identify and employ the use of standardized recipes, formulas and conversions, measurements, food cost formulas and baker's percentage.	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	
Identify and practice industry safety and sanitation standards including the safe handling and storage of food products and demonstrate good personal hygiene standards.		<input checked="" type="checkbox"/>							<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
Define and demonstrate professionalism and teamwork and develop proper work habits and ethical behavior in the culinary workplace.			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>				

LEGEND

- A. Define baking terms.
- B. Identify equipment and utensils used in baking and proper use and care.
- C. Demonstrate proper selection of equipment and and utensils for specific application.
- D. Identify ingredients used in baking.
- E. Demonstrate proper scaling and measurement techniques.
- F. Apply basic math skill to recipe conversion.
- G. Describe properties and list functions of various ingredients.
- H. Define and describe the steps in the production of yeast-leavened breads.
- I. Prepare a variety of yeast leavened breads.
- J. Evaluate the quality of yeast leavened breads.
- K. Define and describe quick breads and mixing methods utilized to produce them.
- L. Prepare and evaluate the quality of a variety of quick breads.
- M. Define and describe the various types of pies and tarts and the mixing methods utilized to produce them.
- N. Prepare a variety of pies and tarts.
- O. Evaluate the quality of prepared pies and tarts.
- P. Define and describe the variety of cookie types and the mixing methods utilized to produce them.
- Q. Produce a variety of cookies.
- R. Evaluate the quality of prepared cookies.
- S. Define and describe the variety of cake types and the mixing methods utilized to produce them.
- T. Prepare a variety of cakes.
- U. Evaluate the quality of prepared cakes.
- V. Demonstrate basic icing and decorating techniques.
- W. Evaluate the quality of iced and decorated cakes.

- X. Define and describe creams, custards, puddings and related sauces.
- Y. Describe the various types of uses of and preparation methods of various creams, custards, puddings and related sauces.
- Z. Prepare a variety of creams, custards, puddings and related sauces.
- AA. Evaluate the quality of prepared creams, custards, puddings and related sauces.
- AB. Discuss the application of mixes and other valued products.
- AC. Define and describe a variety of fillings and toppings for pastries and baked goods.
- AD. Discuss methods of preparation and finishing techniques for various fillings and toppings.
- AE. Prepare a variety of fillings and toppings for pastries and baked goods.
- AF. Demonstrate the presentations of baked goods and desserts.
- AG. Evaluate the quality of presentations of baked goods and desserts.
- AH. Discuss nutritional concerns as they apply to baking.
- AI. Discuss the recipe modification to create more nutritionally beneficial baked goods and desserts.

Course SLO/PSLO	A	B	C	D
Identify and safely demonstrate individual culinary skills and practices necessary in the professional bakery with an emphasis on function and ID of ingredients and the different mixing methods involved in the process.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Identify, produce, and evaluate bakery products with emphasis on balancing proper flavors, seasoning, textures and using baking terminology, and pleasing visual presentation.	<input checked="" type="checkbox"/>			
Identify and employ the use of standardized recipes, formulas and conversions, measurements, food cost formulas and baker's percentage.	<input checked="" type="checkbox"/>			
Identify and practice industry safety and sanitation standards including the safe handling and storage of food products and demonstrate good personal hygiene standards.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Define and demonstrate professionalism and teamwork and develop proper work habits and ethical behavior in the culinary workplace.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

LEGEND

- A. Explain, examine and demonstrate principles and concepts of quality food procurement and identification, food and baking preparation and cost controls, service, and proper use of tools and equipment to produce and serve a variety of professional food items.
- B. Demonstrate skills in various areas of the culinary hierarchy: human relations, leadership and personnel management, ethical decision making.
- C. Practice standards in behavior, ethics, grooming and dress appropriate to culinary industry professionals.
- D. Discuss the standards of restaurant regulations involving liquor protocol and health and safety regulations.

16. **Course Competencies. DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "COURSE COMPETENCIES/ISSUES/SKILLS" and enter text in that screen. Course competencies are smaller, simpler tasks that connect to and facilitate the SLOs.**

Competency
Define baking terms.
Identify equipment and utensils used in baking and proper use and care.
Demonstrate proper selection of equipment and and utensils for specific application.
Identify ingredients used in baking.
Demonstrate proper scaling and measurement techniques.
Apply basic math skill to recipe conversion.
Describe properties and list functions of various ingredients.
Define and describe the steps in the production of yeast-leavened breads.
Prepare a variety of yeast leavened breads.
Evaluate the quality of yeast leavened breads.
Define and describe quick breads and mixing methods utilized to produce them.
Prepare and evaluate the quality of a variety of quick breads.
Define and describe the various types of pies and tarts and the mixing methods utilized to produce them.
Prepare a variety of pies and tarts.
Evaluate the quality of prepared pies and tarts.
Define and describe the variety of cookie types and the mixing methods utilized to produce them.
Produce a variety of cookies.
Evaluate the quality of prepared cookies.
Define and describe the variety of cake types and the mixing methods utilized to produce them.
Prepare a variety of cakes.
Evaluate the quality of prepared cakes.
Demonstrate basic icing and decorating techniques.
Evaluate the quality of iced and decorated cakes.

Define and describe creams, custards, puddings and related sauces.
Describe the various types of uses of and preparation methods of various creams, custards, puddings and related sauces.
Prepare a variety of creams, custards, puddings and related sauces.
Evaluate the quality of prepared creams, custards, puddings and related sauces.
Discuss the application of mixes and other valued products.
Define and describe a variety of fillings and toppings for pastries and baked goods.
Discuss methods of preparation and finishing techniques for various fillings and toppings.
Prepare a variety of fillings and toppings for pastries and baked goods.
Demonstrate the presentations of baked goods and desserts.
Evaluate the quality of presentations of baked goods and desserts.
Discuss nutritional concerns as they apply to baking.
Discuss the recipe modification to create more nutritionally beneficial baked goods and desserts.

17. Recommended Course Content and Timeline. The course content facilitates the course competencies. Course content may be organized by weeks, units, topics or the like.

- Week I: Mixing Methods
 - Creaming Methods
 - Biscuit Methods
 - Muffin Methods
- Week II: Quick Breads
 - Muffins, Scones, Biscuits, Pound Cakes, Cookies
 - Brownies, Lemon Bars
- Week III: Bread Mixing
 - Straight Dough, Preferments, Basic Breads and Baguettes
- Week IV: Doughnuts and Crepes
 - Pastry Creams, Creme Anglaise
 - Doughnuts and Fritters
 - Crepes and Canolis
- Week V: Midterm Practical
 - Test on Mixing Methods and Bread Procedures
- Week VI: Pies and Tarts
 - Flaky Dough, Mealy Dough Sweet Dough
 - Assorted Pies and Tarts
- Week VII: Cakes and Tortes
 - Beginning Cakes and Tortes
 - Angel Food Cake Method
 - Two Step Cake Method
 - Hi-Ratio Cake Method
- Week VIII: Assessment and Practical
 - Final Practical
 - Italian Meringue Buttercream
 - Pastry Cream
 - Sweet Dough
 - Basic Decoration

18. Program Learning Outcomes. DO NOT ENTER TEXT IN THE TEXT BOX BELOW. Click on the yellow button "PLOs" and enter text in that screen. Program Student Learning Outcomes (PLOs) supported by this course. If you are not a "program" use the Liberal Arts PLOs, view them by clicking on ? icon to the right.

Program SLO
Explain, examine and demonstrate principles and concepts of quality food procurement and identification, food and baking preparation and cost controls, service, and proper use of tools and equipment to produce and serve a variety of professional food items.
Demonstrate skills in various areas of the culinary hierarchy: human relations, leadership and personnel management, ethical decision making.
Practice standards in behavior, ethics, grooming and dress appropriate to culinary industry professionals.
Discuss the standards of restaurant regulations involving liquor protocol and health and safety regulations.

19. College-wide Academic Student Learning Outcomes (CASLOs). FIRST, fill out the CASLO grid located in the UHMC tab above. Click on the HELP icon for tips on determining support for the CASLOs and indicate your choices below by clicking on the box in front of each supported CASLO. NOTE: Our campus does not use the Preparatory Level, Level 1 and Level 2 designations in the chart below.

<input checked="" type="checkbox"/>	Creativity - Able to express originality through a variety of forms.
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<input checked="" type="checkbox"/>	Level 1
<input checked="" type="checkbox"/>	Critical Thinking - Apply critical thinking skills to effectively address the challenges and solve problems. <input checked="" type="checkbox"/> Preparatory Level
<input checked="" type="checkbox"/>	Information Retrieval and Technology - Access, evaluate, and utilize information effectively, ethically, and responsibly. <input checked="" type="checkbox"/> Preparatory Level
<input checked="" type="checkbox"/>	Oral Communication - Practice ethical and responsible oral communications appropriately to a variety of audiences and purposes. <input checked="" type="checkbox"/> Preparatory Level
<input checked="" type="checkbox"/>	Quantitative Reasoning - Synthesize and articulate information using appropriate mathematical methods to solve problems of quantitative reasoning accurately and appropriately. <input checked="" type="checkbox"/> Preparatory Level
<input checked="" type="checkbox"/>	Written Communication - Write effectively to convey ideas that meet the needs of specific audiences and purposes. <input checked="" type="checkbox"/> Preparatory Level

GenED SLO

Creativity - Able to express originality through a variety of forms.

Critical Thinking - Apply critical thinking skills to effectively address the challenges and solve problems.

Information Retrieval and Technology - Access, evaluate, and utilize information effectively, ethically, and responsibly.

Oral Communication - Practice ethical and responsible oral communications appropriately to a variety of audiences and purposes.

Quantitative Reasoning - Synthesize and articulate information using appropriate mathematical methods to solve problems of quantitative reasoning accurately and appropriately.

Written Communication - Write effectively to convey ideas that meet the needs of specific audiences and purposes.

20. **Linking.** CLICK ON CHAIN LINK ICON IN UPPER RIGHT HAND CORNER TO BEGIN LINKING. Please click on the ? to the right for help.

21. **Method(s) of delivery appropriate for this course.** Please click on the ? to the right for help.

- Classroom/Lab (0)

22. **Text and Materials, Reference Materials, and Auxiliary Materials.** Please click on the ? to the right for help.

- Wayne Gisslen. Fundamental of Baking. sixth. Wiley, 2013.
- Wayne Gisslen. Study Guide to Accompany Professional Baking. sixth. Wiley, 2013.

23. **Maximum enrollment.** Please click on the ? to the right for help.

18 maximum, space limitations and safety issues

24. **Particular room type requirement.** Is this course restricted to particular room type? Please click on the ? to the right for help.

YES

Kitchen Lab

25. **Special scheduling considerations.** Are there special scheduling considerations for this course? Please click on the ? to the right for help.

NO

26. **Are special or additional resources needed for this course?** Please click on the ? to the right for help.

N/A

27. **Does this course require special fees to be paid for by students?** Please click on the ? to the right for help.

NO

28. Does this course change the number of required credit hours in a degree or certificate? Please click on the ? to the right for help.

Lessens the overall credits for the Culinary Arts AAS, CA and Co as well as for the Pastry Cook CO.

29. Course designation(s) for the Liberal Arts A.A. degree and/or for the college's other associate degrees. Please click on the ? to the right for help.

Degree	Program	Category
Associate in Arts:	Liberal Arts	LE - Elective
AS:		
AAS:	Culinary Arts - All	PR - Program Requirement
BAS:		
Developmental/ Remedial:		

For Both Baking and Culinary

30. Course designation(s) for other colleges in the UH system.

CULN 150 Kapiolani CC, Hawaii CC, Leeward CC, Kauai CC

31. Indicate the year and page # of UHMC catalog referred to. For new or modified courses, please indicate the catalog pages that need to be modified and provide a sheet outlining those changes.

2014-2015 Catalog pages, 40, 41, 105

32. College-wide Academic Student Learner Outcomes (CASLOs). Please click on the HELP icon for more information.

Standard 1 - Written Communication Write effectively to convey ideas that meet the needs of specific audiences and purposes.		
Outcome 1.1 - Use writing to discover and articulate ideas.		2
Outcome 1.2 - Identify and analyze the audience and purpose for any intended communication.		1
Outcome 1.3 - Choose language, style, and organization appropriate to particular purposes and audiences.		2
Outcome 1.4 - Gather information and document sources appropriately.		2
Outcome 1.5 - Express a main idea as a thesis, hypothesis, or other appropriate statement.		1
Outcome 1.6 - Develop a main idea clearly and concisely with appropriate content.		2
Outcome 1.7 - Demonstrate a mastery of the conventions of writing, including grammar, spelling, and mechanics.		1
Outcome 1.8 - Demonstrate proficiency in revision and editing.		1
Outcome 1.9 - Develop a personal voice in written communication.		2
Standard 2 - Quantitative Reasoning Synthesize and articulate information using appropriate mathematical methods to solve problems of quantitative reasoning accurately and appropriately.		
Outcome 2.1 - Apply numeric, graphic, and symbolic skills and other forms of quantitative reasoning accurately and appropriately.		2
Outcome 2.2 - Demonstrate mastery of mathematical concepts, skills, and applications, using technology when appropriate.		2
Outcome 2.3 - Communicate clearly and concisely the methods and results of quantitative problem solving.		2
Outcome 2.4 - Formulate and test hypotheses using numerical experimentation.		2
Outcome 2.5 - Define quantitative issues and problems, gather relevant information, analyze that information, and present		2

results.		
Outcome 2.6 - Assess the validity of statistical conclusions.		2
Standard 3 - Information Retrieval and Technology. Access, evaluate, and utilize information effectively, ethically, and responsibly.		
Outcome 3.1 - Use print and electronic information technology ethically and responsibly.		1
Outcome 3.2 - Demonstrate knowledge of basic vocabulary, concepts, and operations of information retrieval and technology.		2
Outcome 3.3 - Recognize, identify, and define an information need.		2
Outcome 3.4 - Access and retrieve information through print and electronic media, evaluating the accuracy and authenticity of that information.		2
Outcome 3.5 - Create, manage, organize, and communicate information through electronic media.		2
Outcome 3.6 - Recognize changing technologies and make informed choices about their appropriateness and use.		2
Standard 4 - Oral Communication Practice ethical and responsible oral communications appropriately to a variety of audiences and purposes.		
Outcome 4.1 - Identify and analyze the audience and purpose of any intended communication.		2
Outcome 4.2 - Gather, evaluate, select, and organize information for the communication.		2
Outcome 4.3 - Use language, techniques, and strategies appropriate to the audience and occasion.		2
Outcome 4.4 - Speak clearly and confidently, using the voice, volume, tone, and articulation appropriate to the audience and occasion.		2
Outcome 4.5 - Summarize, analyze, and evaluate oral communications and ask coherent questions as needed.		2
Outcome 4.6 - Use competent oral expression to initiate and sustain discussions.		2
Standard 5 - Critical Thinking Apply critical thinking skills to effectively address the challenges and solve problems.		
Outcome 5.1 - Identify and state problems, issues, arguments, and questions contained in a body of information.		1
Outcome 5.2 - Identify and analyze assumptions and underlying points of view relating to an issue or problem.		1
Outcome 5.3 - Formulate research questions that require descriptive and explanatory analyses.		1
Outcome 5.4 - Recognize and understand multiple modes of inquiry, including investigative methods based on observation and analysis.		1
Outcome 5.5 - Evaluate a problem, distinguishing between relevant and irrelevant facts, opinions, assumptions, issues, values, and biases through the use of appropriate evidence.		2
Outcome 5.6 - Apply problem-solving techniques and skills, including the rules of logic and logical sequence.		2
Outcome 5.7 - Synthesize information from various sources, drawing appropriate conclusions.		2
Outcome 5.8 - Communicate clearly and concisely the methods and results of logical reasoning.		2
Outcome 5.9 - Reflect upon and evaluate their thought processes, value system, and world views in comparison to those of others.		2
Standard 6 - Creativity Able to express originality through a variety of forms.		
Outcome 6.1: Generate responses to problems and challenges through intuition and non-linear thinking.		2
Outcome 6.2: Explore diverse approaches to solving a problem or addressing a challenge.		2
Outcome 6.3: Sustain engagement in activities without a preconceived purpose.		2
Outcome 6.4: Apply creative principles to discover and express new ideas.		2
Outcome 6.5: Demonstrate the ability to trust and follow one's instincts in the absence of external direction		2
Outcome 6.6: Build upon or adapt the ideas of others to create novel expressions or new solutions.		2

33. Additional Information

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