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<tr><td>Course title</td><td colspan="5">Herbs, Spices and Essential oils</td></tr>
<tr><td>Course code</td><td colspan="5">CCUL 118</td></tr>
<tr><td>Course type</td><td colspan="5">Required</td></tr>
<tr><td>Level</td><td colspan="5">Diploma</td></tr>
<tr><td>Year / Sememster of study</td><td colspan="5">2nd year/ 2nd semester</td></tr>
<tr><td>Lecturer’s name</td><td colspan="5">TBA</td></tr>
<tr><td>ECTS</td><td>4</td><td>Lectures/Week</td><td>2</td><td>Laboratories/ Week</td><td>N/A</td></tr>
<tr><td>Course Aim</td><td colspan="5">The primary objective of this course is to provide students with comprehensive knowledge and skills in the field of spices and aromatic herbs, including their types, characteristics, and applications in culinary settings. Through theoretical and practical instruction, students will gain an understanding of the diverse range of spices and aromatic herbs, their flavor profiles, and the relevant legislation and hygienic decrees governing their use in food preparation. Emphasis will be placed on developing the ability to identify and distinguish between different types of spices and herbs, as well as their appropriate usage in various culinary applications such as bakery and confectionery, meat products, ready meals, and beverages. Additionally, students will learn to create customized spice blends and mixtures tailored to specific food products, considering factors such as flavor compatibility, intensity, and cultural preferences. By the end of the course, students will emerge with a comprehensive understanding of spices and herbs, equipped with the skills to enhance culinary creations and meet the diverse needs and preferences of consumers.</td></tr>
<tr><td>Learning outcomes</td><td colspan="5">By the end of the course, students are expected to:
1. Basic Understanding of the Science of Spices:
• Explore the scientific principles behind the flavors, aromas, and medicinal properties of spices, including their chemical composition and biological effects.
2. Types of Herbs and Spices and How to Use Them:
• Discover a wide variety of herbs and spices, learning about their origins, flavor profiles, and culinary applications across different cuisines. Develop skills in selecting, storing, and utilizing herbs and spices effectively in cooking.
3. Periodic Table of Spices and Creation of Spice Pairings and Blends:
• Learn about the organization of spices based on flavor compounds and characteristics, facilitating the creation of balanced and harmonious spice pairings</td></tr>
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	and blends. Master the art of crafting custom spice blends suited for specific culinary purposes. 4. **Methods of Creating Essential Oils:** • Delve into the techniques used to extract essential oils from herbs and spices, including distillation, cold pressing, and solvent extraction. Understand the factors influencing the quality, purity, and potency of essential oils. 5. **Use of Essential Oils in Cookery:** • Explore the culinary applications of essential oils, including their role as flavoring agents, natural preservatives, and aromatic enhancers in cooking. Learn proper techniques for incorporating essential oils into recipes while ensuring safety and optimal flavor dispersion.		
Prerequisites	NONE	Corequisites	NONE
Course Content	1. **Characteristics of Spices:** a. Gain an introduction to the world of spices, exploring their origins, cultural significance, and historical use in culinary traditions around the globe. b. Dive into the rich history of herbs and spices, tracing their journey from ancient civilizations to modern-day culinary practices. c. Explore the classification of spices based on the plant parts used, such as seeds, bark, roots, and leaves, understanding the unique flavor profiles and applications of each. 2. **Legislation and Regulation of Culinary Herbs and Vegetables:** Understand the legal and regulatory frameworks governing the production, distribution, and labeling of culinary herbs and vegetables, ensuring compliance with food safety standards and quality control measures. 3. **Selection and Preparation of Spices:** a. Learn techniques for adjusting spices before use, including toasting, grinding, and blending, to unlock their full flavor potential and enhance culinary creations. b. Explore best practices for storing spices to maintain freshness, flavor potency, and shelf life, minimizing exposure to light, heat, and moisture to preserve quality. 4. **Characteristics of Spices from Valid Decrees:** a. Examine the content of substances present in spices, such as essential oils, volatile compounds, and active ingredients, influencing their aroma, taste, and therapeutic properties. b. Develop sensory skills to evaluate the smell, taste, and culinary uses of different spices, discerning nuances in flavor profiles and understanding their compatibility with other ingredients. c. Explore traditional and innovative combinations of spices, discovering synergies that enhance flavor complexity and elevate culinary creations. 5. **Chili Pepper and Products Thereof:**		

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<tr><td></td><td>a. Investigate the characteristics of chili peppers grown in different regions worldwide, exploring variations in heat levels, flavor profiles, and culinary applications.
b. Learn about the production process of iconic chili-based products such as Tabasco sauce, exploring fermentation, aging, and bottling techniques.
c. Discover the diversity of Asian chili sauces, from sriracha to sambal, exploring their ingredients, flavor profiles, and cultural significance in regional cuisines.
6. Salted Spice Extracts:
a. Explore the properties and types of salt, including sea salt, kosher salt, and flavored salts, understanding their roles in seasoning, preservation, and texture enhancement.
b. Learn about the production and application of bouillons and yeast extracts, versatile ingredients used to enhance flavor and aroma in soups, sauces, and savory dishes.
7. Mustard Characteristics and Production:
a. Discover the types of mustard, from classic yellow mustard to specialty varieties like Dijon and whole-grain mustard, exploring their flavor profiles, heat levels, and culinary uses.
b. Explore additives commonly used in mustard production, such as vinegar, spices, and sweeteners, understanding their role in flavor modulation and product consistency.
8. Mixtures of Spices:
a. Explore popular spice blends used to season meats, including barbecue rubs, steak seasonings, and poultry blends, understanding how different combinations of spices enhance flavor and texture.
b. Learn about spice mixtures used in baking production, such as pumpkin pie spice, apple pie spice, and gingerbread spice, adding warmth and depth to baked goods.
c. Discover spices used in the production of beverages, including mulled wine blends, chai spice mixes, and cocktail bitters, infusing drinks with complexity and aroma.
d. Explore oils and vinegars infused with spices, such as chili oil, garlic-infused olive oil, and herb-infused vinegars, adding depth and flavor to dressings, marinades, and condiments.
9. Visit to an Enterprise Engaged in Spice Finishing:
Gain practical insights into spice production and finishing processes through a guided visit to a spice enterprise, observing firsthand the methods and techniques used to process, package, and distribute spices to consumers.</td></tr>
<tr><td>Lecturing Methodology</td><td>The course is delivered through lectures, discussion, assignments, presentations, case studies and laboratory applications.</td></tr>
<tr><td>Bibliography</td><td>Required:
Title: Science of Spice
Author(s): Dr. Stuart Farrimond
Publisher: DK
Published : 2018</td></tr>
<tr><td>Assessment Policy</td><td><table><tr><td>50 %</td><td>Final Exam</td></tr><tr><td>30 %</td><td>Mid –Term / Tests / Quizzes</td></tr><tr><td>10 %</td><td>Class Participatio</td></tr></table></td></tr>
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		10 %	Class Attendance & Participation	
Language	ENGLISH			
ECTS Allocation	**Estimated student's work time distribution in hours:**			
	Contact hours		Student's private time	
	Lecture	23	Private study	56
	Mid-Term Test	1	Homework / Assignments / Projects	20
	Final Exam	2	Test preparation	5
			Final Exam Preparation	15
	Total:	26	Total:	96