

Course Schedule SCIN381 Aroma and Flavor Science for Innovation and Bio-Business

Morning session 10:00-12:00 hr, Afternoon session 13:00-16:00 hr

Week	Topic (Morning session) 10:00-12:00 hr	Instructor	Topic (Afternoon session) 13:00-16:00 hr	Instructor
1 Jan 8, 2024	<p>Lecture</p> <ul style="list-style-type: none"> <li>● Application and innovation of flavor and fragrance: From antiquity to modern industries</li> <li>● Perceptions of aroma and flavor</li> <li>● Assignment briefing</li> </ul>	B400/Sittiwat	<p>Laboratory</p> <ul style="list-style-type: none"> <li>● Laboratory orientation</li> <li>● Recognition test</li> <li>● Threshold</li> <li>● Perceptions of aroma and flavor</li> </ul>	NX00/Sittiwat
2 Jan 15, 2024	<p>Lecture</p> <ul style="list-style-type: none"> <li>● Genesis of flavors in foods</li> <li>● Flavor-food interactions and their release</li> </ul>	B400/Sittiwat	<p>Lecture</p> <ul style="list-style-type: none"> <li>● Sensing of flavor and fragrance (odor and taste)</li> </ul>	B400/ Napassorn (BT)
3 Jan 22, 2024	<p>Lecture</p> <ul style="list-style-type: none"> <li>● Application of flavors in foods 1</li> </ul>	Salaya/ Siryupa	<p>Laboratory</p> <ul style="list-style-type: none"> <li>● Application of flavors in foods 1</li> </ul>	Salaya/ Siryupa
4 Jan 29, 2024	<p>Lecture</p> <ul style="list-style-type: none"> <li>● Packaging materials enhancing stability of aroma and flavor in finished goods</li> </ul>	Salaya/ Siryupa	<p>Laboratory</p> <ul style="list-style-type: none"> <li>● Packaging materials enhancing stability of aroma and flavor in finished goods</li> </ul>	Salaya/ Siryupa
5 Feb 5, 2024	<p>Lecture</p> <ul style="list-style-type: none"> <li>● Phenomena of mass transfer</li> </ul>	Salaya/ Thitisilp	<p>Laboratory</p> <ul style="list-style-type: none"> <li>● Phenomena of mass transfer</li> </ul>	Salaya/ Thitisilp
6 Feb 12, 2024	<p>Lecture</p> <ul style="list-style-type: none"> <li>● Mass transfer of chemical compounds related to aroma and flavor during application and in finished goods</li> </ul>	Salaya/ Thitisilp	<p>Laboratory</p> <ul style="list-style-type: none"> <li>● Mass transfer of chemical compounds related to aroma and flavor during application and in finished goods</li> </ul>	Salaya/ Thitisilp

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7 Feb 19, 2024	Lecture/Demo <ul style="list-style-type: none"> <li>Psychological basis of perfumery</li> <li>Application of fragrances in cosmetics and personal care products</li> <li>Sniffing perfumes</li> </ul>	B400/Sittiwat	Laboratory <ul style="list-style-type: none"> <li>The Maillard reaction</li> <li>Lipid oxidation</li> <li>Flavor formation in vegetables</li> <li>Flavor creation and compounding</li> </ul>	NX00/Sittiwat
Midterm examination (Mar 4 - Mar 8, 2024)				
8 Mar 11, 2024	Lecture <ul style="list-style-type: none"> <li>Flavor/aroma profiling: Instrumental analysis</li> </ul>	B400/Sittiwat	Lecture/Demo <ul style="list-style-type: none"> <li>Flavor/aroma profiling: sensory descriptive analysis</li> </ul>	B400/Sittiwat
9 Mar 18, 2024	Lecture <ul style="list-style-type: none"> <li>Aroma and scent: Raw material plants</li> </ul>	B400/ Napassorn (BT)	Laboratory <ul style="list-style-type: none"> <li>Flavor/aroma profiling: Instrumental analysis</li> </ul>	BT/Sittiwat
10 Mar 25, 2024	Lecture <ul style="list-style-type: none"> <li>Aroma and scent: Chemistry, manufacture and their stability</li> </ul>	B400/Sitthivut		
11 April 1, 2024	Lecture <ul style="list-style-type: none"> <li>Aromatherapy</li> </ul>	B400/Nattinee	Laboratory <ul style="list-style-type: none"> <li>Steam distillations and extraction</li> </ul>	NX00/Sittiwat
12 Apr 22, 2024	Lecture <ul style="list-style-type: none"> <li>Regulation for industrial application in flavor and fragrance</li> </ul>	B400/Sittiwat	Presentation for the assignment	B400/Sittiwat,
Final examination (April 29 - May 10, 2024)				