

Course Syllabus for Sustainable Development of Natural Products (SCSL196)

Credit: 3(2-3-5)
Lecture Time: Wednesdays 08:00-10:00 o'clock at SC2-340
Lecturer: Pahol Kosiyachinda, Ph.D.
Google class code: 6bgfkhvy

Week	Date	Topic
1	5 Aug	Orientation & Course Overview: Introduction to sustainable business perspectives in natural product industries.
2	5 Aug	The Role of Natural Products in the Global Economy: From biological origins to market value and consumer perception. (Make-up @13:00-18:00)
3	19 Aug	Sustainability Concepts: Balancing people, planet, and profit.
4	19 Aug	Types of Natural Products & Market Sectors: Fragrances, flavors, foods, cosmetics, and therapeutics as business categories. (Make-up @13:00-18:00)
5	26 Aug	Entrepreneurship in Natural Product Businesses: Opportunity identification, innovation, and start-up models.
6	2 Sep	Budgeting, Cost–Benefit, and Risk Analysis: Financial planning and feasibility for small-scale production.
7	9 Sep	Supply Chains: From raw materials to consumers; analyzing cost, efficiency, and sustainability.
8	16 Sep	Consumer Behavior & Behavioral Economics: Understanding market demand, preferences, and decision-making.
9	23 Sep	Case Study Analysis: Sustainable business models and success stories in the natural product sector.
10	30 Sep	Midterm Examination
11	7 Oct	Data-Driven Management & Green Innovation: Using data, biotechnology, and green chemistry to improve value creation.
12	28 Oct	Intellectual Property, Biopiracy, and Ethical Management: Legal and ethical perspectives in commercialization.
13	4 Nov	Quality Assessment, Standards, and Certification: Ensuring quality and compliance in sustainable business.
14	11 Nov	Marketing, Branding, and Eco-Labeling: Positioning natural products in competitive markets.
15	18 Nov	Sustainable Business Canvas Workshop: Applying learned concepts to develop a sustainable business model.
16	25 Nov	Group Project Presentations: Presentation of business model proposals and financial analyses.
17	2 Dec	Final Examination

Evaluation

TQF	Evaluation Method	Week	Proportion
1	- Participation/Activities - Attendance/Attention	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	30 %
2	- Laboratory	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13	30%
3	- Midterm Examination	1, 2, 3, 4, 5, 6, 7,	20 %
4	- Final Examination	9, 10, 11, 12, 13	20 %

Course Syllabus for Sustainable Development of Natural Products (SCSL196)

Credit: 3(2-3-5)
Lecture Time: Wednesdays 10:00-13:00 o'clock at SC2-340
Lecturer: Pahol Kosiyachinda, Ph.D.
Google class code: 6bgfkhvy
Laboratory technician: Ms. Suchada Geawduanglek

Week	Date	Topic
1	5 Aug	Course Kickoff + Field Observation Walk
2	5 Aug	Sustainability Mapping Workshop (Make-up @13:00-18:00)
3	19 Aug	Product Dissection Lab
4	19 Aug	Market and Value Chain Mapping (Make-up @13:00-18:00)
5	26 Aug	Ethics & Entrepreneurship in Bioprospecting
6	2 Sep	Eco-Business Simulation
7	9 Sep	Supply Chain Optimization Challenge
8	16 Sep	Midterm Examination
9	23 Sep	Carbon & Financial Footprint Analysis
10	30 Sep	Pricing and Market Feasibility Workshop
11	7 Oct	Green Innovation & Process Efficiency Lab
12	28 Oct	Policy and Investment Pitch
13	4 Nov	Eco-Packaging and Branding Design
14	11 Nov	Quality Assurance & Certification Standards*
15	18 Nov	Consumer Behavior Survey & Analysis**
16	25 Nov	Group Project: Business Model Presentation
17	2 Dec	Final Examination

Grading:

Total percentage	0-49	50-54	55-59	60-64	65-69	70-74	75-79	80-100
Grade	F	D	D+	C	C+	B	B+	A
Grade	U	S					O	

*We will have an excursion to visit a company “Simple Scents” - Soi Tonsuk, Bang Phai, Bang Khae District, Bangkok 10160

**We will have an excursion to visit a company “Saisook Khao Yai” - 286 Thanarat Road, Mu Si, Pak Chong District, Nakhon Ratchasima 30130