

# Module 1 Overview

## MODULE 1: From Bean to Brew: The Journey of Coffee

This module introduces students to the lifecycle of coffee, emphasizing the key stages of cultivation, processing, roasting, and brewing. Through an exploration of scientific principles and environmental considerations, students will gain foundational knowledge of how coffee is produced and consumed around the world. Quiz 1: Coffee Science and Sustainability evaluates students' understanding of the technical and environmental aspects of coffee production. It reinforces key concepts from the module and ensures students can accurately identify and explain the processes, science, and sustainability practices involved in coffee production. Assignment 1: The Lifecycle of a Coffee Bean requires students to describe the major stages of coffee production, explain the chemical changes during roasting and brewing, and reflect on the environmental impact of coffee farming. It directly assesses all three module-level objectives by prompting students to synthesize factual knowledge with critical thinking and propose sustainable practices.

### Course Learning Outcomes

**CLO 1.** Describe the lifecycle of coffee from cultivation to consumption, including key processes and global variations.

**CLO 2.** Explain the scientific processes involved in coffee cultivation, roasting, and brewing.

**CLO 3.** Evaluate the environmental and ethical considerations of coffee production and consumption.

### Module Learning Objectives

**MLO 1.1:** Describe the key stages of coffee cultivation and processing. (CLO 1)

**MLO 1.2:** Identify the chemical changes that occur during coffee roasting and brewing. (CLO 2)

**MLO 1.3:** Discuss the environmental impact of coffee farming and propose sustainable practices. (CLO 3)

### Module 1 Content

**LESSON:** From Beans To Brew (MLO 1.1, 1.2, 1.3)

**VIDEO:** Natural Coffee Processing (MLO 1.1)

**QUIZ:** Coffee Science & Sustainability (MLO 1.1, 1.2, 1.3)

**ASSIGNMENT:** The Lifecycle of a Coffee Bean (MLO 1.1, 1.2, 1.3)

### Module 1 Alignment Map

This table indicates the alignment with of Module 1 Content with Course Level Objectives (CLO) and Module Level Objectives (MLO).

CLO	MLO	Module 1 Content
<b>CLO 1:</b> Describe the lifecycle of coffee from cultivation to consumption, including key processes and global variations.	<b>MLO 1.1:</b> Describe the key stages of coffee cultivation and processing.	<ul style="list-style-type: none"> <li>• <b>LESSON:</b> From Beans To Brew</li> <li>• <b>VIDEO:</b> Natural Coffee Processing</li> <li>• <b>QUIZ:</b> Coffee Science &amp; Sustainability</li> <li>• <b>ASSIGNMENT:</b> The Lifecycle of a Coffee Bean</li> </ul>
<b>CLO 2:</b> Explain the scientific processes involved in coffee cultivation, roasting, and brewing.	<b>MLO 1.2:</b> Identify the chemical changes that occur during coffee roasting and brewing.	<ul style="list-style-type: none"> <li>• <b>LESSON:</b> From Beans To Brew</li> <li>• <b>QUIZ:</b> Coffee Science &amp; Sustainability</li> <li>• <b>ASSIGNMENT:</b> The Lifecycle of a Coffee Bean</li> </ul>
<b>CLO 3:</b> Evaluate the environmental and ethical considerations of coffee production and consumption.	<b>MLO 1.3:</b> Discuss the environmental impact of coffee farming and propose sustainable practices.	<ul style="list-style-type: none"> <li>• <b>LESSON:</b> From Beans To Brew</li> <li>• <b>QUIZ:</b> Coffee Science &amp; Sustainability</li> <li>• <b>ASSIGNMENT:</b> The Lifecycle of a Coffee Bean</li> </ul>