Farming						
	Topics / Goals	**Illinois Standards**	**Lessons (All lessons include time planting or harvesting, observing and documenting, and cooking or taste testing)**	**Fieldtrip / Special Events**	**Project**	**Homework**
Week 1 April 24th	Is a Burger a Plant? *The food of almost any kind of animal can be traced back to plants*	LS2.A LS2.B	• What's On Your Burger? • The Parts of a Plant • Why do we need plants to live? • Seed Guessing Game			What Vegetables are Indigenous to Illinois? What is the Climate in Illinois?
Week 2 May 1st	Do Plants Have Parents? *Where do Plants Come from?* Inheritance and Variation	LS1.B LS3.A LS3.B	• Life Cycle of a Plant • Plant Identification • Plant Reproduction • Planting Kitchen Garden Herbs		Work on Designing your Farm (layout, location, crops, etc)	Video: How Wolves Change Rivers

			• Herb Identification and Taste Testing		Group Project	
Week 3 May 8th	What do Plants Need to Grow?	LS2.C LS4.C	• Bugs, Soil, Water and Sun • Preventing the effects of natural hazards • Safe and Proper use of agricultural chemicals, farm tools and equipment • Composting			Bring items to compost
Week 4 May 15th	Fieldtrip: Garfield Park Conservatory		• Observing and documenting w/ colored pencil • Introduce sketch pads • Plant Identification & Classification			Bring items to compost
Week 5 May 22nd	Verma Compost (Worms and Other Bugs)	ESS3.B	• Farm Planning & Design • Hydroponics • Aquaponics • Plant Identification • (Perennials V. Annuals) • Soil Blocking			Bring items to compost

Week 6 May 29th	Are Bugs Good for Us?		• Egg Shell Fertilizers • Beneficial Bugs and Harmful Bugs • Natural pesticides • Controlling Weeds	Yoga on the Farm Guest Instructor: Yirser Ra Hope of Yoga Skills		Bring items to compost
Week 7 June 5th	Fieldtrip: Botanical Gardens		• Observing and documenting w/ colored pencil			Bring items to compost
Week 8 June 12th	Presentations of Farm Design				Project Due!	Bring items to compost
Week 9 June 19th	Break					
Week 10 June 26th						
	Post-Production					
Week 11 July 3rd	What does it mean to be Urban?		• Discuss the three types of communities (urban, rural, suburban)		Work on Farm Business Plan	Watch Video: Urban Girl Adventures Bring items to compost

			• Equipment needed to transport from rural farms to urban grocery stores • Transportation		Group Project 	
Week 12 July 10th	What is the Economics of Farming?		• Basic Principles of Supply and Demand • Watch Video: What It's Like to Inherit a Farm			Research job postings for agriculture occupations. Bring items to compost
Week 13 July 17th	How is food Processed on the Farm?		• Introduction to the processing station • Other tools and Equipment used in Production • Food Preservation: Packaging, Canning or Freezing, slaughtering, combining commodities for customer use.			Interview a local grocery store, convenience store, restaurant, or café owner (Where does your food come from?) Bring items to compost
Week 14 July 24th	Marketing		• Advertising, product packaging, distribution system			

			• USDA/FDA Standards			
Week 15 July 31st	Fieldtrip: *Something Charitable or has to do with food distribution (Maybe visit IMAN)* *https://www.imancentral.org/*			Food Distribution (Charity)		Interview Due! Bring items to compost
Week 16 August 7th	Presentations of Business Plans				Project Due!	Bring items to compost
Week 17 August 14th	Fieldtrip: Visit a Bank Preparation for Culminating Event					Bring items to compost
Week 18 August 21st	Fieldtrip: Blueberry Farm, Covert Michigan		• Pick blueberries • Learn about tools and equipment used on the blueberry farm			Bring items to compost
Week 19 August 28th	Preparation for Culminating Event			Yoga on the Farm Guest Instructor: Yirser Ra Hope of Yoga Skills		Bring items to compost
Week 20 Sept. 4th	Culminating Event: Family, Friends and Neighbors gather to celebrate the first cohort's completion of the Smooth & Social Roots Agriculture Program. Participants receive Awards and Certificates. Display student business plans and farm designs.					

Processing and Marketing Shifts

Starting week 11, students will spend one additional hour per week on the farm. The students will prepare added value products, participate in post-production activities such as packaging and designing marketing materials for Sunday Farmer's Market, and practice sales, good customer service and community relations.

	Monday	Tuesday	Wednesday	Thursday	Sunday (Farmers market)
Week 11					
Week 12					
Week 13					
Week 14					
Week 15					
Week 16					
Week 17					
Week 18					
Week 19					
Week 20					

Illinois Standards Reference

LS1.B: Growth and Development of Organisms ♣ Reproduction is essential to the continued existence of every kind of organism. Plants and animals have unique and diverse life cycles. (3-LS1-1)

LS3.A: Inheritance of Traits ♣ Many characteristics of organisms are inherited from their parents. (3-LS3-1) ♣ Other characteristics result from individuals' interactions with the environment, which can range from diet to learning. Many characteristics involve both inheritance and environment. (3- LS3-2)

LS3.B: Variation of Traits ♣ Different organisms vary in how they look and function because they have different inherited information. (3-LS3-1) ♣ The environment also affects the traits that an organism develops. (3-LS3-2)

LS2.C: Ecosystem Dynamics, Functioning, and Resilience ♣ When the environment changes in ways that affect a place's physical characteristics, temperature, or availability of resources, some organisms survive and reproduce, others move to new locations, yet others move into the transformed environment, and some die. (secondary to 3-LS4-4)

LS4.C: Adaptation ♣ For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. (3-LS4-3)

ESS2.D: Weather and Climate ♣ Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next. (3-ESS2-1) ♣ Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years. (3-ESS2-2)

ESS3.B: Natural Hazards ♣ A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts. (3-ESS3-1) (Note: This Disciplinary Core Idea is also addressed by 4-ESS3-2.)

LS2.A: Interdependent Relationships in Ecosystems ♣ The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as "decomposers." Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem. (5-LS2-1)

LS2.B: Cycles of Matter and Energy Transfer in Ecosystems ♣ Matter cycles between the air and soil and among plants, animals, and microbes as these organisms live and die. Organisms obtain gases, and water, from the environment, and release waste matter (gas, liquid, or solid) back into the environment. (5-LS2-1)