

Draft

Academic Plan for the Sustainable Living & Learning Communities (SLLC)

April 30, 2018

This Academic Plan for a developed SLLC provides overview of the existing and potential academic activities of this group of programs. This description is one component of a master visioning effort for the long-term development of the SLLC. For description of the SLLC and for concept maps for its future development go to <http://sllc.ucdsitefarm.acsitefactory.com/> .

This Academic Plan includes:

1. Academic Mission Statement and Guiding Principles
2. University and CAES Guidance
3. SLLC Values Proposition Guidance
4. Range of Experience
5. Overview of Existing Academic Opportunities
6. Proposed Expanded Opportunities including Interdisciplinary Studies--IN PROGRESS
7. Moving Forward on Expanded Academic Offerings within the SLLC--IN PROGRESS

1. Academic Mission Statement and Guiding Principles

The academic mission of the Sustainable Living/Learning Communities is to promote individual and collective transformative learning for progress towards a more sustainable and just society. It is clear that humanity is facing challenges of climate change and limited resources. Simultaneously, societal factors have exacerbated issues of economic inequality that can change the quality of educational and research experience in our public universities. These challenges will impact today's UC Davis students throughout their adult lives. Increasingly, these students dedicate themselves during their undergraduate careers to meeting these challenges and creating a more sustainable and just future. The integration of food production systems with the built environment is an area of broad interest to students that holds the possibility of solutions for our collective future. This content provides the core of the SLLC learning experience.

The SLLC academic mission could be accomplished through expanding the learning opportunities across the SLLC using existing university methods of disciplinary coursework, interdisciplinary coursework, and mentored internships, as well as, by developing innovative learning opportunities such as peer-facilitated study groups, residential study groups, field experimentation in integrated systems, and student employment opportunities that involve creative thought and leadership.

Guiding principles for learning and academics within this environment include:

- Emphasis on experiential learning centered on food production and the built environment
- Connecting academic theories to practice in environmental and social systems
- Student driven questions and leadership with well-mentored experimentation
- A process of team analysis, iterative review, collaboration, and participatory learning
- Includes community engaged scholarship and action
- Community of learners where both expertise and novice are present and respected
- Dedication to acknowledging and addressing historic and existing economic and social barriers within the university system and the SLLC

2. Guidance from UCD Undergraduate Education and from the UCD College of Agricultural and Environmental Sciences

The SLLC is a Big Idea/Priority for the College of Agriculture and Environmental Sciences but also serves the wider campus and community. Currently the majority of students involved are at the undergraduate level. For these reasons we look to the UC Davis Educational Objectives for Undergraduate Students as well as the College of Agricultural and Environmental Sciences Academic and Strategic Plan of 2015. Both clearly support the existence of the learning opportunities that an expanded SLLC could provide.

UC Davis Educational Objectives for Students

[Find this document on-line at <https://ue.ucdavis.edu/educational-objectives.html>]

SLLC provides rich unique opportunities for directly meeting all of the stated objectives outlined in both of these documents. The dedication to hands-on experiential learning develops higher cognitive skills such as critical thinking, creativity and analytic ability. Student-driven experimentation allows for development of skills in leadership and collaboration as well as the ability to ask the right questions. Active engagement in this place-based effort builds a global perspective and understanding of interactions between individuals, societies, and the natural world. And finally, the existing community of learners can be expanded upon within the SLLC to prepare students for independent thinking and lifelong learning.

College of Agricultural and Environmental Sciences Academic and Strategic Plan of 2015

[Find this document on-line here <http://www.caes.ucdavis.edu/about/files/ASPRReport.pdf>]

This Academic and Strategic Plan gives direction for new college initiatives and provides the following four priority themes for growth and integration within the college for the future. The interconnectedness of these four themes is introduced in the plan in this way. “Importantly, these themes are deeply intertwined. Defining the interrelationship of the college in this way represents a new vision that highlights the significant opportunities that will propel the college forward.”

- Sustainable Agriculture and Food Systems
- Equitable, Healthy Communities

- Ecosystem Viability and Functionality
- Meeting the Challenges of Climate Change

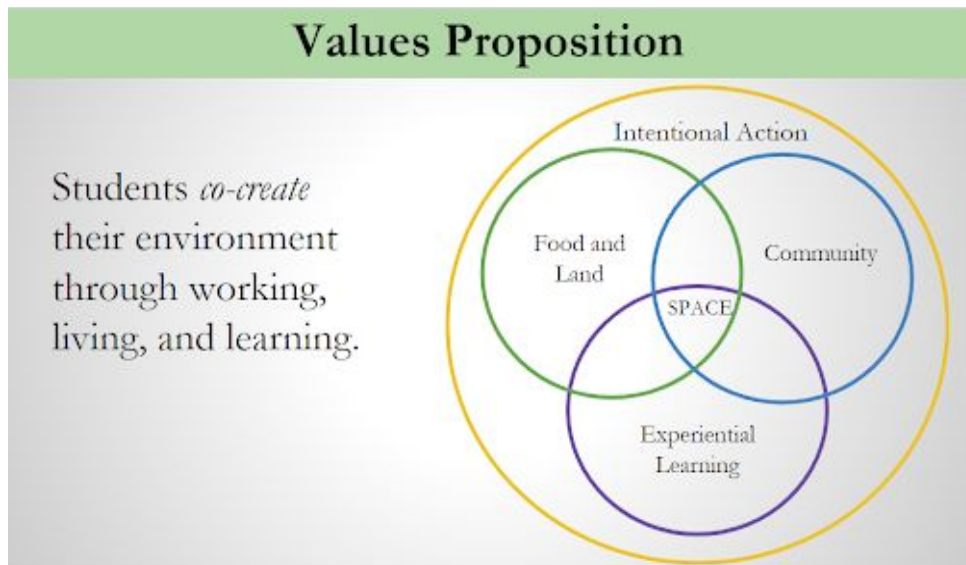
These themes align clearly with the academic guiding principles and the content areas that the SLLC addresses. Realization of the SLLC plan would be a response to many of the recommendations made in the CAES strategic plan, specifically “promote crosscutting educational experiences” and to “develop bold and integrative outreach, teaching, and educational platforms that build and maintain the strength of the college.” The Student Farm, is a special academic program of CAES and as such aligns completely with these college objectives.

3. Guidance from the SLLC Values Proposition SAFs Capstone Team 2014

This Academic Plan is also informed by the SLLC Values Proposition conducted by the 2014 Sustainable Agriculture and Food Systems (SAFs) Capstone student project team. The Values Proposition (VP) was originally created in order to (1) articulate and explain what the SLLC collectively values and (2) articulate how the SLLC as a neighborhood is valuable to the University. To arrive at the VP the 2014 capstone team repeated an iterative process with stakeholders from all communities. These values represent the overarching goals and activities of all of the communities and now serve as a point of reference to ensure that proposed expanded academic offerings are authentic to the SLLC. This is summarized succinctly with “Students co-create their environment through working, living, and learning.”

- *Intentional Action* is the value that encompasses all others. It is the emphasis placed by all participants on conscious decision-making, interaction with each other, and modification of the environment. This intention is brought to every activity in the SLLC and can be seen through the focus on process.
- *Connection between people, food, and land* is unique within the University, and often first attracts participants to the space. It provides an intimate, dynamic relationship with local ecological cycles and food production.
- *Experiential learning* fortifies this connection via participant driven projects and creates a learning experience that exercises different mind muscles compared to common University activities including an emphasis on reflection.
- *Community* refers to the social network that thrives within these spaces. The SLLC provides the intellectual, creative, and supportive space in which to learn and grow as individuals and as a community. Participants share resources and experiences while inconstant conversation with one another.
- *Space* is easily accessed and is unique due to its co-creation by community members over the past forty years. Physically, the space houses and interacts with community activities. It also provides less tangible emotional and mental benefits.

The Values Proposition process provides this interpretation of the interaction of these values.



4. Range of Experience as described by the SAFs Capstone Team 2014

Another product from the same 2014 capstone team is the explanation of range of experiences that are possible in these learning environments. The range of experience provides examples of various levels of participation within the SLLC. All levels are valuable in distinct ways. Participation ranges in breadth and depth and progression through experiences and is not necessarily linear. Community members may experience multiple levels simultaneously within one or more communities. This awareness has influenced development of scaffolded and advancing opportunities at the Student Farm over the last 3 years. Internships move from novice to more advanced and often lead to employment and leadership opportunities. In the residences, similarly there are roles of leadership and responsibility and community development such as managing finthat students move into over time.

The experiences are defined here



5. Overview of Existing Academic Opportunities

The current academic opportunities of the existing SLLC programs are many. Common to all is a focus on experiential, student driven learning in areas of sustainability. The Student Farm, as a special academic program of the CAES, is currently best able to offer rich academic programs for students that are integrated into course of study but every program is contributing significantly to learning. In a well-supported and fully integrated SLLC, other programs would expand offerings and new opportunities would arise through the better integrated space and faculty and staff involvement. Below we review academic opportunities provided.

Academic Courses

Student Farm

CA&ES

ABT/IAD 142 Equipment and Technology for Small Farms (2 units)

ABT 289A-001 D-Lab I: Energy, Agriculture and Development

CRD 20 Food Systems (4 units)

ECL 216. Ecology and Agriculture (4 units)*

ENT100L General Entomology Lab (2 units)

FYS-004-017 Examining the Arguments of the Local Food Movement

GEO 200 DN: Socio-Spatial Analysis (4 units)

IAD 202 Analysis and Determinants of Farming Systems (4 units)*

PLP 120 Plant Pathology (Student Farm plant materials collected and used in the course)**

PLP 205A. Diseases of Vegetable and Field Crops (3 units)

PLS 1 Agriculture, Nature and Society (3 units)

PLS 2 Botany and Physiology of Cultivated Plants (4 units)

PLS 5 Plants for Garden, Orchard and Landscape (2 units - professor retired, status of course unknown)**

PLS 12 Plants and Society (4 units)**

PLS 15 Introduction to Sustainable Agriculture (4 units)*

PLS 49 Organic Crop Production Practices (3 units)*

PLS 105 Concepts in Pest Management (3 units)

PLS/IAD 160 Agroforestry: Global and Local Perspectives (3 units)

PLS 170 A and B Fruit and Nut Cropping Systems (2 units)

PLS 171 Principles and Practices of Plant Propagation (4 units)

PLS 190 Seminar on Alternatives in Agriculture (2 units - does not use outdoor space)

PLS 193 Garden and Farm-Based Experiential Education Methods (2 units)*

College of Letters and Science

CHI 110 Sociology of the Chicana/o Experience (4 units)*

CHI 113 Latin American Women's Engagement in Social Movements (4 units)*

CHI 198 Decolonizing Spirit

SOC 195 Farm to Fork: Food, Agriculture and Society in California, Israel and Palestine

College of Engineering

ENG 3 Engineering Design*

School of Education

EDU 142 Introduction to Environmental Education (4 units)

EDU 209 Image-based Field Research (4 units)**

EDU 307 Methods in Elementary Science Teaching (2 units)

Tri-Coops and Domes Residences

LDA 3: Sustainable Development Theory and Practice

Sustainable Living and Learning Communities Project Report II, SAFS capstone

Sustainable Living and Learning Communities Project Report I, SAFS capstone

TTP 298: Path to Zero Net Energy

US-Denmark Renewable Energy Summer Course

CRD 198: Community Research

ECI 189/CRD 198: Community Processes for Sustainability

ECI 127/128: Planning of Green Civil Systems

LDA 181: Regenerative Landscapes

Internships

SF offers novice, and practitioner level internships in the following Student Farm areas of operations: Ecological Garden, Market Garden, Shop, Flower Project, Field trips for children, and Food Security. For more advanced students we offer specialized internships on the following topics: greenhouse management, garden-scale composting, pest management, crop planning, medicinal and culinary herbs. Internships include close work with supervisors in the field, weekly written reflections, mid-quarter check-ins, and assessment of learning. Specialized internships require a product or deliverable that enhances the existing programs. Student Farm staff have worked closely with the Center for Excellence in Education to develop appropriate methods of assessment for experiential learning that can be shared across SLLC programs.

Project Compost offers various internships that range from Compost Captain, Unit Director, Education and Outreach Director, to Piles Director, Vermicomposting and Workshop Director,

Additional Internships across the SLLC Programs

- Sustainable Living and Learning Communities Visioning Workgroup
- Solar-heated Radiant Floor Retrofit
- Garden Coordinator
- Sliding Scale Rent Study
- Baggins End Development Plan
- Domes Landscape Management Plan
- Zero Net Energy Study
- Domes Long Term Community Planning
- PG&E Grant Energy Efficiency Retrofit Project
- Domes Academic Advisory Plan
- Baggins End Wastewater Awareness and Diversion Project
- UC Davis Arboretum - Edible Landscaping Internship
- Domes Future Planning Internship
- SCHA Board Member Internship
- Beekeeping Internship

Research

Graduate students and experienced undergraduate students are able to tailor research projects at the farm to their specific interests. They can do this with a Student Farm mentor or with a faculty mentor with an agreement formalized ahead of time with Student Farm director to assure that logistics and management are coordinated and possible with other requirements of the facility.

For example, the Student Farm currently offer novice and practitioner level internships in Crop Breeding for Organic Systems to undergraduates as well as teaching and research opportunities to graduate students in this topic. This is a grant-funded project in collaboration with the Dept. of Plant Sciences that started in 2015 and will go through 2019. In addition, there is currently a graduate student-led study underway reviewing the role of student farms in campus food justice movements, specifically examining the Student Farm's food access work through its Community Table Project. The graduate student works with a team that includes other Student Farm staff. Another graduate student is working with the Market Garden Coordinator to conduct research on no-till farming practices.

There have been several master's level and one phd level thesis conducted in various parts of the SLLC.

Tours Workshops, Community Engagement and Outreach

- Imagining America
- Geography 302 (Sacramento City College)

- Education for a Sustainable Living Program
- International English Extension Course
- Meeting Productivity and Member Accountability
- Natural Building and Regenerative Building Design
- Empowerment Through Worker Owned Cooperatives
- Introduction to Power, Privilege and Oppression
- Facilitation and Conflict Resolution workshop
- Essentials of Dynamic Facilitation
- Bees, Permaculture and Food Forests
- Know Your Rights Training
- Bike Forth, Bicycle Repair and Education Space
- Deconstructing Sustainability Through Dance
- Forming Community Agreements
- Learning the Language of Peace
- Cooperatives and Anti-Oppression
- Stories Under the Fig Tree
- Self Care for Activists
- Botanical Decolonization
- Troubleshooting Meeting Facilitation
- A Dictionary of Deviance: The ABC's of Radical* Romance and Sexuality
- Reimagining Sustainability
- Visualizing the Resistance
- Anti-Oppression and Fair Housing Law
- Love Doesn't Trump Hate: Moving Beyond Performative Allyship

6. [IN PROGRESS]

Proposed Expanded Academic Opportunities including Interdisciplinary Studies

- Additional disciplines included in SLLC efforts
- Increased faculty involvement supported for teaching, research and service
- Expanded academic opportunities with regards to built environment, landscape architecture, engineering, and design
- Expanded academic opportunities with regards to self-governed communities/cooperatives
- Opportunities for interdisciplinary study and research made possible through faculty support and campus-level commitment
- Space maintained for student creative process
- Demonstration spaces for evolving best practices in sustainable agriculture, green infrastructure, habitat provision, and cooperative living.
- New facilities to extend community-based service learning opportunities, including a teaching kitchen, flexible meeting/classroom facilities, and outdoor spaces for gardener trainings and educational visits.
- New barn facility to enhance learning and production capacity at the student farm.

7. [IN PROGRESS]

Steps in moving forward on expanded academic offerings

- Work closely with CAES leadership to understand college priorities and vision wrt undergraduate education and the potential of the SLLC
- With direction from college and campus level, form an academic advisory committee that includes faculty, undergraduate and graduate students from CAES and other collaborating colleges
- Examine the value of experiential learning for today's undergraduate. Perhaps conduct a cost/benefit analysis of that learning modality for forward-thinking and strategic academic planning. UCD Center for Excellence in Education could support
- Present SLLC academic plan to CA industry stakeholders for review and evaluation of possible impact with regards to expectations for prepared professionals.
- Continue to review other programs across UC system and elsewhere to inform and support development of SLLC.
- Develop long-range plan to look at the feasibility of building the Center for Sustainable Living and Learning