NFS 195 – Sustainable Cooking
Syllabus Spring 2021

Meeting Day/Time: Tuesdays, 1:10-4:10
Location: 231 Marsh Life Sciences
Credits: 3
Instructor: Dr. Amy B. Trubek
Office: 251 Carrigan Wing
Email: atrubek@uvm.edu
Office Hours: by appointment
Teaching Assistant: Sarra Talib
Teaching Assistant Email: stalib@uvm.edu

Course Description: This course introduces students to different strategies and important concepts involved in developing a lifetime practice of sustainable cooking. The course will consider the social, environmental and economic pillars of sustainability. How can we develop sustainable cooking practices? What are the most important variables in developing a sustainable cooking practice? Low carbon emissions? Vegetarian diets? Local purchasing? Students are introduced to these strategies and concepts in the same way as everyday Americans – through the process of meal preparation. Thus, concepts and practices are always considered as interconnected. Finally, a major goal of this course is to have the student be able to understand and use these concepts not just in the classroom but in their home and work settings.

Dietetics Program Standards met in Sustainable Cooking:

KRDN 2.1 Demonstrate effective and professional oral and written communication and documentation.

KRDN 2.6 Demonstrate an understanding of cultural competence.

KRDN 3.6 Explain the processes involved in delivering quality food and nutrition services.

Course Aims:
This course aims to:

- Increase food literacy through understanding the complex dynamics of food that has been grown, procured, prepared, and eaten using a sustainability framework.
- Connect this knowledge of that relationship to your own food, and to the global environment in which you live.
- Develop critical thinking skills through analysis and evaluation of sustainable food practices.
- Describe the interconnections among the food system sustainability themes and apply these themes to ingredient selection and meal design.
Increase the capacity to take an active role in dealing with the challenges of our time through envisioning opportunities and challenging values.

Enhance food agency in order to apply sustainability values while cooking for yourself.

Learning Objectives:
At the end of the course the student will be able to:

- Identify basic concepts important to cooking the major classes of food with confidence: food safety (time and temperature); proper equipment; knife skills, processing whole foods; heat and heat transfer.
- Identify and navigate the full cycle of actions necessary in making a meal.
- Identify and analyze sensory components of food and the social benefits of shared meals.
- Demonstrate a working knowledge of how to read, analyze and adapt recipes.
- Develop a skillful cooking practice.
- Define sustainable food production and consumption from different perspectives.
- Identify key challenges and solutions facing sustainable food systems.
- Identify strategies important to sustainable cooking: ingredient sourcing, plant forward meals, seasonal practices, pantry production, and more.
- Demonstrate the applications of both the basic concepts of foods and sustainable food systems while making a dish and preparing an entire meal.
- Explain the importance of cultural and social influences in sensory preference, food pairing and meal preparation.
- Articulate a clear vision and strategy for incorporating sustainability into their individual cooking practices and, if applicable, work settings.

Sustainable Cooking: Hybrid Strategies and Expectations

- You are expected to complete all online elements of this course. Failure to do so will result in a lower grade. Note that Blackboard has tracking features that allow me to know whether or not you have accessed videos. We will use these features to periodically check on every student’s participation.
- All the online elements of the course need to be completed before the weekly experiential learning class in the foods lab. All readings and videos must be read or watched completely before class. If you don’t understand a reading or video, bring in a question or list of questions. We will have a review at the beginning of each in person session.
- You are expected to commit to both the in-person labs and on-line lectures. You will only be able to make up 1 lab/class session per semester without risking reduced points for engagement and application.
- Religious Holidays: The official policy for excused absences due to a religious holiday is as follows: Students have the right to practice the religion of their choice. Each semester students should submit in writing to their instructors by the end of the second full week of classes their documented religious holiday schedule for the semester. Faculty must
permit students who miss work for the purpose of religious observance to make up this work.

- I do not accept late assignments.

Class Conduct:
I expect professional standards of behavior in the classroom.

- Cell phones should be turned off for the entire class period except when related to class activities (e.g. photos of dishes, checking recipe, etc.).
- Chronic tardiness is not acceptable.
- In case of a campus emergency, the instructor will be notified via the classroom computer, and the instructor will notify students of the emergency.
- Do not disrupt other students and the class flow by getting up and leaving unless absolutely necessary.

Class Code: All class participants are expected to adhere to the academic honesty policies of the University of Vermont. Additionally, the University prohibits discrimination and unlawful harassment. Please see the University of Vermont Code and Student Handbook available on the UVM website.

All assignments need to satisfy the standards of academic integrity. Plagiarism (not attributing other people’s ideas, arguments or phrases properly) and cheating will result in a failing grade. Offences against the Code of Academic Integrity are deemed serious and insult the integrity of the entire academic community. Any suspected deliberate violations of this code are taken very seriously and will be forwarded to the Center for Student Ethics & Standards for further investigation.

Student Learning Accommodations: In keeping with University policy, any student with a documented disability interested in utilizing accommodations should contact ACCESS, the office of Disability Services on campus. ACCESS works with students and faculty in an interactive process to explore reasonable and appropriate accommodations via an accommodation letter to faculty with approved accommodations as early as possible each semester. All students are strongly encouraged to meet with their faculty to discuss the accommodations they plan to use in each course. Contact ACCESS: A170 Living/Learning Center; 802-656-7753; access@uvm.edu; http://www.uvm.edu/access

UVM’s policy on disability certification and student support: http://www.uvm.edu/~uvmppg/ppg/student/disability.pdf


Grade Appeals: If you would like to contest a grade, please follow the procedures outlined in this policy: http://www.uvm.edu/~uvmppg/ppg/student/gradeappeals.pdf
Grading: For information on grading and GPA calculation, go to http://www.uvm.edu/academics/catalogue and click on Policies for an A-Z listing.


FERPA Rights Disclosure: The purpose of this policy is to communicate the rights of students regarding access to, and privacy of their student educational records as provided for in the Family Educational Rights and Privacy Act (FERPA) of 1974. http://www.uvm.edu/~uvmppg/ppg/student/ferpa.pdf

Promoting Health & Safety: The University of Vermont’s number one priority is to support a healthy and safe community. Center for Health and Wellbeing http://www.uvm.edu/~chwb/ Counseling & Psychiatry Services (CAPS) Phone: (802) 656-3340 C.A.R.E. If you are concerned about a UVM community member or are concerned about a specific event, we encourage you to contact the Dean of Students Office (802-656-3380). If you would like to remain anonymous, you can report your concerns online by visiting the Dean of Students website at http://www.uvm.edu/~saffairs/

Required Readings:

- Excerpts from Samrin Nosrat’s Salt, Fat, Acid, Heat
  [It is worth purchasing this book because it will be useful for you far beyond this course but it is optional]
- Eat Lancet Summary Report, Healthy Diets from Sustainable Food Systems
- Eat Lancet Full Report, Healthy Diets from Sustainable Food Systems
- Not Yet at the Table by Caitlin Morgan and Amy B. Trubek in Elementa: Science of the Anthropocene
- A 21st Century Spice by Amy B. Trubek, Maya Moore and Eric Bishop Von Wettberg

Other readings as assigned

Course Assessments:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percent of Grade</th>
<th>Total Points</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>Class Participation (including lab activities, YellowDig posts)</td>
<td>25%</td>
<td>250</td>
<td>Throughout the course</td>
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<tr>
<td>Pre-Lab Work – mise en place, backwards sequence, ingredient sustainability</td>
<td>10%</td>
<td>100</td>
<td>Weeks 2-8</td>
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<tr>
<td>Post-Lab Work – evaluation and sensory analysis</td>
<td>10%</td>
<td>100</td>
<td>Weeks 2-8</td>
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<tr>
<td>CLASS SCHEDULE</td>
<td>ASSIGNMENTS &amp; DUE DATES</td>
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<tr>
<td><strong>PART ONE: WHAT IS FOOD AGENCY? WHAT IS A SUSTAINABLE DIET?</strong></td>
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<tr>
<td><strong>Module 1: Week 1</strong>&lt;br&gt;Online Only</td>
<td><strong>Module 1: What is a Sustainable Diet?</strong>&lt;br&gt;A. Introduction to Food Systems&lt;br&gt;B. Introduction to Sustainable Food Principles&lt;br&gt;C. Introduction to Food Agency</td>
<td><strong>Due Friday by 5pm:</strong>&lt;br&gt;- Introduce yourself on YellowDig&lt;br&gt;- Review syllabus and answer questions&lt;br&gt;- Read summary of EAT Lancet report&lt;br&gt;- Watch video overview of EAT Lancet recommendations&lt;br&gt;- Respond to the recommendations from the EAT Lancet report in YellowDig with three questions.</td>
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<td>Objectives:</td>
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<td>• Explain why sustainable diets (human and planetary) are a priority&lt;br&gt;• Explore guidelines, principles and recommendations for healthy sustainable diets&lt;br&gt;• Recognize the core principles in the concept of food agency&lt;br&gt;• Evaluate and reflect upon your current food agency</td>
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<tr>
<td><strong>Module 1: Week 2 - 2/9</strong>&lt;br&gt;Skills Evaluation</td>
<td><strong>Module 1: Food Agency in Action</strong>&lt;br&gt;- Recognize the core principles in the concept of food agency&lt;br&gt;- Evaluate and reflect upon your current food agency&lt;br&gt;- Introduction to the lab space and knife skills&lt;br&gt;- Skills assessment: timing, organization, culinary</td>
<td><strong>Before Class:</strong>&lt;br&gt;- Fill out food agency scale&lt;br&gt;- Respond to YellowDig prompts on Food Agency videos in discussion board</td>
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<td><strong>Winter Chopped Salad</strong>&lt;br&gt;<strong>Braised Carrots</strong></td>
<td><strong>Due by 5pm on Friday</strong>&lt;br&gt;- YellowDig conversation on EAT Lancet report as translated into everyday cooking practices – 1 post and 1 link&lt;br&gt;- Post-lab work: Reflection on Practice</td>
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### Module 2:
#### Week 3 – 2/16
**Online Lab Prep**
**In-Person Lab**

<table>
<thead>
<tr>
<th><strong>Farm Size and Scale</strong></th>
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<tbody>
<tr>
<td>A. Local, Regional, and Global Food</td>
</tr>
<tr>
<td>B. Food System Diversity and Resiliency</td>
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</tbody>
</table>

**Objectives:**
- Discuss the pros and cons of different farm sizes and scales in relation to everyday food choices
- Discuss assumptions of the EAT Lancet report as to best practices in relation to current conditions
- Explain the importance of mise en place drawing and sensory analysis in food agency
- Comparative analysis of seasonal ingredients – local and national

Roasted Root Vegetables
Spinach and Gorgonzola Stuffed Roast Potatoes
Winter Chopped Salad (version 2)

**Before Class:**
- YellowDig post on experiences with local and regional foods
- Readings and videos on scale, access and sustainable practices
- Pre-Lab Work: Mise en Place Drawing
- Pre-Lab Work: Ingredient Sustainability Analysis

**In Class:**
- Ingredient sustainability discussion
- Responding to available products
- Seasonal recipes and techniques
- Sensory reflection and analysis (to be completed in class)
- Spinach and Gorgonzola Stuffed Potato
- Braised, Glazed Carrots

**Due the Friday after class session:**
- Post Lab Work: Reflection on Practice

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### Module 2:
#### Week 4 – 2/22
**Online Lab Prep**
**In-Person Lab**

<table>
<thead>
<tr>
<th><strong>Agroecological Food Production</strong></th>
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</thead>
<tbody>
<tr>
<td>A. Overview of the sustainability impacts of current food production system</td>
</tr>
<tr>
<td>B. Introduction to alternative food production systems</td>
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</tbody>
</table>

**Objectives:**
- Describe advantages and disadvantages of the industrial food system, including social, economic, environmental, and health impacts
- Identify alternative production systems, including their limitations and benefits
- Explore the complexity of connecting sustainable agriculture goals to traditional diets.

Tomato, chard and spinach sauté
Moroccan carrot salad
Couscous

**Before Class:**
- Readings and videos about greenhouse gas emissions and animal protein consumption in China
- Yellow Dig - Post one video discussing changing dietary habits in China and discuss
- Pre-Lab Work: Backwards Sequencing

**In Class:**
- Ingredient Sustainability discussion
- Responding to available products
- Seasonal recipes and techniques
- Sensory reflection and analysis (to be completed in class)
- Backwards Sequence

**Due the Friday after class session:**
- Post Lab Work: Reflection on Practice

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### Module 3:
#### Week 5 – 3/9
**Online Lab Prep**
**In Person Lab**

<table>
<thead>
<tr>
<th><strong>Animal Protein and Green House Gas Emissions</strong></th>
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<tbody>
<tr>
<td>A. Introduction to calculations as to GHG emissions and the link to everyday meal practices</td>
</tr>
<tr>
<td>B. Introduction to backwards sequencing</td>
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</table>

**Before Class:**
- Readings and videos about green house gas emissions and animal protein consumption in China
- Yellow Dig - Post one video discussing changing dietary habits in China and discuss
- Pre-Lab Work: Backwards Sequencing
<table>
<thead>
<tr>
<th>Module 3: Week 6 – 3/16</th>
<th>Animal Protein and Green House Gas Emissions</th>
</tr>
</thead>
</table>
| Objectives:            | A. Explore tofu as a sustainable food produce and as a part of Chinese culinary tradition.  
|                        | B. Discuss tradeoffs between vegetable and animal proteins for human versus planetary health |
| Pre-Lab Work: Ingredient Sustainability Analysis |
| In Class:              | Pre-Lab Work: Ingredient Sustainability Analysis |
|                        | Product Identification |
|                        | Developing and using a backwards sequence |
|                        | Ingredient selection |
|                        | Kung Pao Chicken |
| Due the Friday after class session: | Post Lab Work: Reflection on Practice |

<table>
<thead>
<tr>
<th>Module 4: Week 7 -3/23</th>
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<tbody>
<tr>
<td>Plant-forward, Minimal Waste Diets</td>
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</tbody>
</table>
| Objectives:            | A. Introduction to plant-based and -forward diets  
|                        | B. Overview of food waste and impacts  
|                        | C. Apply backwards sequence |
| Pre-Lab Work: Backwards Sequence |
| Pre-Lab Work: Ingredient Sustainability Analysis |
| Due in Class:          | Ingredient Sustainability Analysis  
|                        | Use and evaluate a backwards sequence  
|                        | Plant-based meal  
|                        | Techniques for reducing food waste |
| Due the Friday at 5pm: | |

<table>
<thead>
<tr>
<th>Before Class:</th>
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<tbody>
<tr>
<td>Readings and videos on blackboard</td>
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<tr>
<td>YellowDig posts— do we push or pull towards sustainable diets?</td>
</tr>
<tr>
<td>Pre-Lab Work: Mise en Place and Backwards Sequence</td>
</tr>
<tr>
<td>Post Lab Work: Reflection on Practice</td>
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<tr>
<td>Sensory reflection and analysis</td>
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</tbody>
</table>
| Module 4: Week 8 - 3/30 | **Plant-forward, Minimal Waste Diets**  
D. Introduction to plant-based and plant-forward diets  
E. Overview of food waste and impacts  
F. Apply backwards sequence  
**Objectives:**  
- Explain the relationships between diet, food waste, and sustainability  
- Describe the advantages and disadvantages of plant-based and plant-forward diets  
- Identify strategies to reduce food waste  
- Explore vegetarian South Indian cuisine  

Kerala Aviyal  
Boona Kichri  
Rice Pudding  

| Before Class:  
| Due in Class:  
- Ingredient Sustainability Analysis Product Identification  
- Use and evaluate a backwards sequence  
- Plant-based meal  
- Techniques for reducing food waste  

**Due Friday at 5pm:**  
Post Lab Work: Reflection on Practice |
|---|---|---|---|---|
| **Module 5: Week 9 – April 6** | **Module 8: Labor and Consumer Preferences**  
A. Overview of farmer and fisher viability, global supply chains and consumer desires  
B. Explore Oaxacan cuisine  

**Objectives:**  
- Identify the roles of workers throughout the supply chain  
- Describe the working conditions and wages of these workers  
- Explain the importance of labor value in food system sustainability  

Memelas  
Tortillas  
Black Beans  
Tomatillo Salsa | **Before Class:**  
- Read *A 21st Century Spice*  
- Yellowdig discussion about culinary tourism, sensory travel, and food systems consequences  
- Pre-Lab Work: Mise en Place and Backwards Sequence  

**In Class:**  
- Round Robin Sensory Analysis  
- Cooking with food system labor in mind: when, why and how are the ethical issues of labor important to sustainable diets?  
- Mid term review |
| **Module 5: Week 10 – April 13** | **Module 9: Preliminary Meal Design Proposal**  

**Objectives:**  
- Demonstrate an understanding of food system sustainability themes | **Before Class:**  
- YellowDig post about meal design  

**In Class:** |
| Healthy Sustainable Meal Design | • Draw connections between the themes  
• Propose culinary strategies that support sustainable food systems  
• Review final assignment | • Product Identification and Sustainability Evaluation Midterm  
• Proposal discussion and recipe vetting and submission |
|---|---|---|
| Module 6: Healthy Sustainable Meal Design  
Week 11 – April 20 | **Synthesis and Reflection: Sustainable, healthy food**  
A. Exploration of guidelines, principles and recommendations for sustainable, healthy diets  
A. **Objectives:**  
• Synthesize and analyze major themes from modules 1-6 in order to design and propose a sustainable healthy meal  
• Utilize an existing sustainable food framework/set of guidelines or create a new one to guide meal recommendation  
• Identify how the recommendation – from ingredients, to recipes to cultural traditions - aligns with chosen social, economic, environmental, and health sustainability goals | In Class:  
**Presentations – Sustainable Healthy Meal Recommendation** |
| No Active Lab | | |
| Module 6: Healthy Sustainable Meal Design  
Week 12 -April 27 | **Meal Execution/Lab Practical Objectives:**  
• Evaluate your food agency and propose how you will incorporate food systems sustainability into your own food choices, diet, actions, and future professional work  
• Determine if it’s possible to cook and eat sustainably. If so, identify guidelines and diets that support these choices. If not, identify actions and steps needed to enable sustainable cooking and eating.  
• Demonstrate your food agency skills. | **Before Class:**  
Reflection on Food Agency and Sustainable Cooking  
**In Class:**  
Lab Practical/ Meal Execution |