# FN 346 Advanced Foods Fall 2021

**Course Description**: 3 cr. Investigate interplay between food compositions, chemical and physical interactions in food preparation. Develop techniques for quantity food production with consideration of sustainable practices. Introduce menu planning variables and demonstrate menu planning for various populations. Prereq: FN 206 and Chemistry 106 or Chem 117.

**Class Schedule**: Lecture Tues/Thurs 2:00-2:50 pm Champions Hall (MCCH 101); Lab each Thursday: 3:00-5:50 pm CPS 211

**Instructor:** Dr. Jasia Steinmetz, RD, CD, M.S.-Epidemiology

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Office hours: Tuesday and Thursday 9:00 am or by appointment

Purpose: The purpose of this class is to provide a deeper understanding of food, food preparation and the interplay between people and cuisine. You will build on your personal knowledge of food and food preparation and the background of FN 101 to apply more complex scientific understanding to the food preparation process. We will also discuss how cuisines develop and how this may influence our professional practice and enjoyment of food. As in all of our UWSP Dietetic courses, the knowledge and skills as described by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) and UWSP provides the template in this class. Additionally, the vision and mission of UWSP help us develop as lifelong learners and citizen leaders of the world. The following is an overview of our course.

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| **Stage 1: Desired Results** |
| Accreditation Council for Education in Nutrition and Dietetics (ACEND): Foundation Knowledge Requirements and Learning Outcomes for DPDs for Dietetics majors   1. Domain 1. Scientific and Evidence Base of Practice: integration of scientific information and translation of research into practice   Upon completion of the program, graduates are able to:  KRDN 1.1 Demonstrate how to locate, interpret, evaluate and use professional literature to make  ethical, evidence-based practice decisions.  KRDN 1.2 Use current information technologies to locate and apply evidence-based guidelines  and protocols.  KRDN 1.3 Apply critical thinking skills   1. Domain 2. Professional Practice Expectations: Beliefs, values, attitudes and behaviors for the professional   dietitian nutritionist level of practice.  Upon completion of the program, graduates are able to:  KRDN 2.1 Demonstrate effective and professional oral and written communication and  documentation.  KRDN 2.5 Identify and describe the work of interprofessional teams and the roles of others with  whom the registered dietitian nutritionist collaborates in the delivery of food and  nutrition services.  KRDN 2.6 Demonstrate an understanding of cultural competence/sensitivity.   1. Domain 3. Clinical and Customer Services: Development and delivery of information, products and   services to individuals, groups and populations.  Upon completion of the program, graduates are able to:  KRDN 3.2 Develop an educational session or program/educational strategy for a target  population.  KRDN 3.3 Demonstrate counseling and education methods to facilitate behavior change and  enhance wellness for diverse individuals and groups.  KRDN 3.4 Explain the processes involved in delivering quality food and nutrition services.   1. Domain 4. Practice Management and Use of Resources: Strategic application of principles of   management and systems in the provision of services to individuals and organizations.  Upon completion of the program, graduates are able to:  KRDN 4.4 Apply the principles of human resource management to different situations.  KRDN 4.5 Describe safety principles related to food, personnel and consumers.  KRDN 4.6 Analyze data for assessment and evaluate data to be used in decision-making for  continuous quality improvement. |

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| Society for Nutrition Education and Behavior (SNEB) Nutrition Educator Competencies for SFN majors   1. Basic Food and Nutrition Knowledge    1. Explain the background, purpose, and components of the appropriate national or international dietary guidelines, including the associated food guidance systems (e.g., the US Dietary Guidelines and MyPlate).    2. Explain the dietary prevention of, and management approaches associated with, the major diet-related public health issues.    3. Critically evaluate the claims associated with a research study finding, food product, dietary supplement or eating style based on the nutrition educator’s knowledge of nutrition and the approaches used to study diet-health relationships. 2. Food Science    1. Describe the functions of food ingredients and food processing techniques and their effects on the nutrient content of foods.    2. Describe the basic types of culinary practices, including the scientific basis for how flavor, texture, and appearance of foods are created or maintained during food preparation.    3. Describe the potential sources of food contamination and the best practices associated with the safe handling of food.    4. Explain how to plan, select, prepare, and manage foods to enhance the well-being of individuals, families, communities, and the food system. 3. Food and Nutrition Policy    1. Describe the roles of government agencies in regulating food systems and the food supply.    2. Describe the history, purpose and funding of key pieces of legislation that authorize programs supporting nutrition education, research, and food assistance to address malnutrition and food security and to promote health.    3. Describe the history and current roles of governmental and nongovernmental organizations that develop and implement nutrition education programs and related health promotion or food security activities.    4. Describe ways to collaborate with community members and other professionals to create communities and settings in which healthy food options are easy, affordable, and desired and unhealthy foods are less prominent and less desired. 4. Agriculture Production and Food Systems    1. Explain the effects of various food processing, packaging, distribution, and marketing practices on food availability, food choices, and nutritional value as well as the amount and types of additives, contaminants, and pathogens in foods.    2. Explain the relationships between natural resources (e.g. soil, water, biodiversity) and the quantity and quality of the food and water supply.    3. Describe ways to collaborate with other stakeholders to promote policies supporting systems that produce healthy food. 5. Written, Oral and Social Media Communication    1. Communicate effectively in written, visual, and oral form, with individuals, the media, and other groups, in ways that are appropriate for diverse audiences.    2. Engage and educate through simple, clear, and motivational language appropriate for diverse audiences.    3. Advocate effectively for action-oriented nutrition education and healthy diets in various sectors and settings. 6. Behavior and Education Theory    1. Describe the biological, psychological, social, cultural, political, and economic determinants of eating behavior, and the associated opportunities and barriers to achieving optimal health and quality of life. |
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| **Enduring Understandings:**  *Students will understand that…*   * Cuisines are reflective of the geography (resources & climate) and culture of society. * Foods (grain, meat/fish/poultry, vegetables, fruits, dairy) have common capabilities which react similarly. These capabilities are the scientific principles of cooking. * Creativity in cooking (different products) comes from the chef using her/his imagination to use unique foods combined in unique steps. |
| **Essential Questions:**   * What is the synergy between geography, food and health? * What is the contribution of food and cuisine to the sustainability of a society? * What are the common capabilities of classes of food? * What are some common procedures in food preparation? * How are foods combined in creative ways? What guides this? |
| **Knowledge (Know):**  Students will/can…   * Describe acceptable standards of food quality. * Identify and evaluate common food products and seasonal foods in terms of characteristics such as appearance, consistency or texture, flavor, and tenderness. * Explain the basic scientific principles or underlying facts which govern cooking processes. |
| **Skills (Be able to):**  Students will/can…   * Demonstrate team leadership skills * Prepare foods in an efficient manner without compromising its quality. * Apply sustainable principles while preparing food. Maximize all resources, including the ingredients, equipment, economics and time. * Conduct research that supports a sustainable food system within a community. |
| **Dispositions (Value/Appreciate):**  Students will/can…   * Increase awareness of cultural cuisines. * Discuss pleasurable eating in different contexts |
| **Stage 2 – Assessment Evidence** |
| **Core Performance Task:**  Goal: Develop a three-week cycle menu based on seasonal ingredients and adapt one week for the school lunch program.  Role: Member of a planning team for food service management and acting nutrition consultant.  Audience: CPS café customers and high school students  Situation: Using the CPS menu as a template, you will plan a three-week menu based on the mission and goals of the CPS café to serve sustainable, local food that is pleasurable and healthy.  Purpose/Product: A three-week cycle menu with one-week adaptation that focuses on the enduring understandings of advanced food preparation.  Standards: As part of this assignment you will:   * Demonstrate menu planning ability considering the following: economics, facilities and equipment, nutrition, health restrictions, and management considerations. * Modify recipe/formula for individual or group dietary needs * Work effectively as a team member * Role of food in promotion of a healthy lifestyle * Promotion of pleasurable eating   **Relationship to Enduring Understandings:**  The cycle menus will reflect your knowledge of seasonal foods, sustainability and understanding of the local cuisine. You will be able to demonstrate your creativity in menu development while considering pleasurable eating.  **Other Assessment Evidence:**   * Attendance and participation in class * Lab attendance and participation, culminating in the blind basket activity * Collaboration in group projects * Farmshed Project documentation * Electronic learning and leadership portfolio |

***Assignments, Policies and Considerations:***

**Note: No late assignments will be accepted. Please note the due dates on the syllabus and plan your schedule accordingly and submit each assignment on D2L by the due date. Early assignments are appreciated.**

1. **Required Text and Readings:**

You are required to read:

* The Culinary Institute of America. (2002) *The Professional Chef 8th edition*. New York, NY: John Wiley and Sons. (text rental)
* McGee, H. (2004) *On Food and Cooking: The Science and Lore of the Kitchen.* New York, NY: Scribner (purchase)
* LeBillon, K. (2012) *French Kids Eat Everything*. New York, NY: Harper Collins.
* New York Times: skim for daily news related to food, food supply and health trends. Read the Food section (published on Wednesday)

1. **Attendance and Participation** (20 pts):

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Attending class meetings and labs are requirements and professional expectation of the course. If you must miss class, please alert Dr. Steinmetz via email as early as possible before the missed class**. If you do not send an email regarding the absence, it will be considered unexcused and points will be deducted from your attendance and participation score.** One excused absence is allowed with no loss of points, but for each absence after that, five points will be deducted from your attendance and participation score up to 20 points. Please be willing to share your class notes with peers or obtain notes from peers. After reviewing class material, please schedule an appointment with me if you have questions or want to further review missed material.

Valuable class information including changes in syllabus schedule and course content, are announced in the first 5 minutes of the class. You are responsible for all missed material.

We will use D2L for formal communication about the course. I will post messages on the front page “news”. All course related handouts, lecture material, supplementary readings will be posted under the course “content”. Grades will be recorded in the “grades” section. All assignments should be posted in the “dropbox “section by the scheduled due date.

The use of cell phones, except in occasional cases of emergency, will not be allowed during the class or food lab.

1. **Food Lab** (10 points each):

Your food lab report is evidence of your understanding of the readings and the experience of the food lab. Each lab day you will demonstrate your understanding of food science and culinary skills in the kitchen. As you become more proficient, you will be expected to demonstrate a greater role in leadership in a team setting, using the professional kitchen as the setting for applying your skills in resource management, attention to detail, creativity, problem solving, active engagement and peer support. Missed lab points may not be recovered since this requires your active participation and personal observation. Lab points are based on the completion of the lab report, your reflection and Dr. Steinmetz’ observations. The lab report must be your original thinking and work, not quotes from the reading materials or other group members. Concepts and principles should be clearly explained in your own words.

\*\* **Due to COVID restrictions, the class will be divided into two sections. You will alternate your lab weeks between a home lab or UWSP lab. New procedures in the food lab for COVID safety will be introduced and followed.**

1. **Farmer’s Market Research** (30 points):

Conducting research is an important skill of our profession. You will gain basic research skills through this local foods project that involves an ethnographic farmer’s market survey, economic analysis and culinary characteristics analysis. Cuisine develops from the available food in a specific geographic location. Skills in identifying and utilizing local food contribute to a sustainable food system and ability to educate others about food. You will expand your knowledge of the local farmer’s market by conducting a market survey and food comparison. This research is the foundation to menu planning and learning to discern differences in varieties of food that meets consumer’s needs and considers agricultural and geographic variables.

1. **Farmshed Sustainability Project** (40 points):

We will learn about the local community food system and educational techniques through a Farmshed project that has several facets. 1) Community kitchens: you will volunteer for one of the processing sessions for the Frozen Asset or two Hmong dinner preparation days. Both Farmshed activities contracted with family farms for produce that is minimally processed for freezing or used in the Hmong dinners. 3) Observation: combine your knowledge of the food supply, kitchen management and food safety to connect food and cooking knowledge and skills. If you were a manager of a community nonprofit and wanted to start a similar program, what did you observe? Here are some sample questions but you are expected to also develop your own. What are the safety considerations in a community kitchen? If you were a manager, what are the main points of instruction that you would introduce? What do you need to know about the local food supply for a successful project? 4) Report and reflection: Write a short paper that reports your observations and your reflections. Reflections are thoughts that make deeper connections between different aspects within society and your life experiences.

1. **Food knowledge and cooking skill video** (Lab Team: 20 points)

Develop an instructional video that highlights food knowledge and cooking skills. Your audience is young adults.

1. **Cycle Menus** (50 points):

Menus highlight cuisines and maximize resources while providing pleasurable eating. You will work in your lab team to develop a three-week cycle menu, which reflects a sustainable food system, appeals to teenagers and meets the USDA guidelines for the National School Lunch program. Increasingly, nutritionists assist schools by increasing the wellness of the school environment in a variety of ways. The school breakfast and lunch programs are effective in promoting optimal health and educating students about food in our world. Menus also reflect careful planning and consideration of resources, population preferences, food availability and affordability and equipment needs. Menus are based on available skills and knowledge of staff as well as kitchen equipment and facilities. Active participation and observation in class, lab and community will help you achieve success in menu planning.

1. **Blind Basket** (50 points):

The culminating kitchen experience is the blind basket activity. You will demonstrate the skills and knowledge that you have gained in the kitchen by individually creating a dish from a tray of ingredients. The following enduring understandings are applied in this activity. 1) Foods (grain, meat/fish/poultry, vegetables, fruits, and dairy) have common capabilities which react similarly. These capabilities are the scientific principles of cooking. 2) Creativity in cooking (different products) comes from unique foods combined in unique steps.

1. **Portfolio** (10 points):

Portfolios demonstrate your progression of learning and leadership with your development of knowledge and skills. All food and nutrition students will develop an electronic portfolio this year. In this class, you will continue to build your portfolio and post your cycle menu, graded lab paper, project evidence and blind basket summary as an artifact on your electronic portfolio this year.

**Grading Procedures:**

You will receive credit based on the following point system:

**Graded Assignments:**

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| Class participation (self and instructor evaluation) | 20 points |
| Food lab principles and evaluations (10 pts each) | 100 points |
| Farmer’s Market Research (group activity) | 30 points |
| Cycle Menus (group activity) | 50 points |
| Farmshed Project | 40 points |
| Food and cooking skill video | 20 points |
| Blind Basket | 50 points |
| Quizzes (3 total) | 75 points |
| Learning ePortfolio | 10 points |
| Total | 395 points |

**Grading Scale:**

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| Grade | Percentage | Grade | Percentage |
| **A** | 95-100% | **C+** | 77-79 |
| **A-** | 90-94 | **C** | 73-76 |
| **B+** | 87-89 | **C-** | 70-72 |
| **B** | 83-86 | **D+** | 67-69 |
| **B-** | 80-82 | **D** | 60-66 |
|  |  | **F** | < 60 |

**Note: The grading scale is based on a point system, not an average. This is automatically calculated on D2L. Therefore, no rounding occurs when final grades are posted. For example, 539/600 points which = 89.8% is still a grade of B.**

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|  | **Tentative Schedule** |
| **Week of:** | **Lecture Topics** |
| Sept. 2 | Syllabus and introduction to professional development in food & cooking |
| Sept. 6 | Tuesday, Sept 8: Plant based eating; senses and flavors, master recipes, **Farmer’s market assignment introduced**  Thursday: Review of principles  **Lab: Chocolate chip cookies (properties of ingredients, control of technique)** |
| Sept 13 | Tuesday: Menus, seasonal foods, geographical influence on cuisine (Mexico, SW USA);**ServSafe document due**  Thursday: Properties of grains  **Lab: Southwest & Mexican cuisine (legumes, spices, grains)** |
| Sept. 20 | Tuesday**:** Legumes  Thursday: Cultural cuisine: (Vegetables)  **Lab: Indian cuisine (Plant based cuisine)** |
| Sept. 27 | Tuesday: Vegetables & Sauces  Thursday: Cycle menu planning; Cycle Menu planning assignment introduced  **Lab: Italian (Pasta and grains)**  **Quiz 1 available** |
| Oct. 4 | Tuesday: Yields  Thursday: Food and Cooking Skills for nutrition education  Lab: Quick Breads & Soup stock |
| Oct. 11 | Tuesday: French Kids Everything book discussion/  Thursday: Cuisine and religion  **Lab: Verrines & soups** |
| Oct. 18 | Tuesday: French Kids Eat Everything-food and cooking skills for children  Thursday: **Seasonal cycle menu due, brief class presentation**  **Lab: Team Food Demonstration** |
| Oct. 25 | Tuesday: Cooking classes with children  Thursday: Cakes and fillings  **Lab: Cakes and fillings** |
| Nov. 1 | Tuesday: Cycle menu for USDA School Meal programs report to class; **Cycle Menu Due**  Thursday: Baking-fine tuning the principles, apply the science & control your ingredients  **Lab:** Yeast Breads (full lab time, 2-6 pm) |
| Nov. 8 | **Quiz 1 available**  Tuesday:, Pastry  Thursday: USDA School meals **Pies** |
| Nov. 15 | Tuesday: Master recipes and food pantry basics  Thursday: Master recipes |
| Nov. 22 | Tuesday**: workday**  Thursday: Happy Thanksgiving |
| Nov 29 | Tuesday: **School Menu presentation. Due in Canvas**  Thursday: **Blind Basket Exam (full lab time)** |
| Dec. 6 | Tuesday: Learning ePortfolio **Farmshed Report Due**  Thursday: Holiday cookies & cleaning (full lab time) **Quiz 2 available** |
| Dec. 15 | **Final exam, 2:45-4:45 pm: Learning & Leadership Portfolio due** |

**The contents of this syllabus are as complete and accurate as possible. The instructor reserves the right to make any changes necessary to the syllabus and course material. The instructor will make every effort to inform the students of changes as they occur. It is the responsibility of the student to know what changes have been made in order to successfully complete the requirements of the course. Any in-class announcement, verbal or written, is considered official addendum to this syllabus.**

**Students with special needs should contact the instructor as early in the semester as possible to make any necessary class/test accommodations**.

**Recommended Study Strategies**

1. Review FN 206 notes that are relevant to the topic. We are building on your base of food and cooking knowledge. (Be sure to save and organize your notes throughout your food courses.)
2. Review each chapter and/or assignment prior to lecture (see Canvas for text readings and supplemental material)
3. Attend all lectures
4. During lecture:
   1. Develop an effective note taking strategy
   2. Identify key words and concepts – use this when referencing the text/notes later to identify the detail required to obtain full understanding of material
5. After lecture study the material again:
   1. Rewrite or type your notes. Use this time to generate questions for the next lecture.
   2. Identify terms and food principles. This is the language of cooking and essential to master for you to apply these in the kitchen.
   3. Maintain a pace with your reading and studying
   4. Repetition has been extremely helpful for most individuals to gain an understanding of the material in this class. Trying to learn all content a day or two before the exam is not recommended and rarely results in success.
6. Learn material in small portions. Learn the parts and then put it together as a whole
7. It is important to integrate the lecture, lab and readings. The course is designed so that you should recognize and be able to manipulate the properties of food, i.e. demonstrate this knowledge in kitchen as well as be able to describe this on the exam.
8. To be an able chef, you must practice outside of class. Both the techniques and familiarity with food cannot be accomplished within the limits of the class and lab. Consider every time you shop and prepare food as part of your homework. Practice the techniques and be adventurous with your food preparation. Cooking is a science but also an art.
9. At the first sign of academic difficulty, meet with me during office hours or after class or by appointment to get help.

**Culinary websites:**

Epicurean: <http://www.epicurean.com/>

Epicurious: <http://www.epicurious.com/>

<http://www.starchefs.com/>

Donna Hay (an Australian cook and entrepreneur): <http://www.donnahay.com.au/>

Farm Girl Fare (from rural Missouri) <http://www.foodiefarmgirl.blogspot.com/>

The French food and cook: <http://www.ffcook.com/index.htm>

Food and Wine: <http://www.foodandwine.com/>

Karina-s Kitchen (gluten free cooking): <http://glutenfreegoddess.blogspot.com/>

Leites Culinaria: <http://www.leitesculinaria.com/>

Lunch Lessons (tips on healthy, yummy lunches for everyone): <http://www.lunchlessons.org/index.html>

Seasonal chef: <http://www.seasonalchef.com/index.htm>

Cedric Grolet, pastry chef, <https://www.facebook.com/cedricgrolet/>

**Kitchen Lab:**

**Required Tools and clothing for lab:**

* Chef’s knife, purchase independently
* Apron (from HPHD office)
* Chef’s beret (from HPHD office)
* Short sleeve shirt

**Procedure:**

1. Recipes will be assigned on the Tuesday prior to lab. This will give you time to review the recipes, ask any questions, and plan. You will also be able to determine the principles being tested during that lab day. (prior to lab)
2. Announcements, demonstrations or directions by Dr. Steinmetz (first 10-15 minutes of lab)
3. Finalise mise en place\* (15 minutes)
4. Prepare the recipes. (1.5 hours)
5. Present and be prepared to discuss the recipes. (15 minutes)
6. Sensory evaluation (10 minutes)
7. Clean and sanitize (20 minutes)

**Quality and Economy:**

1. We will use the freshest, highest quality ingredients with conscious effort.
2. You will be required to optimize ingredients. This means being familiar with the ingredient, the correct preparation and method of cooking as well as proper storage. For example, peeling a vegetable requires proper washing, trimming of nonedible parts parsimoniously and peeling with a vegetable peeler (not a paring knife).
3. As a gesture of goodwill and pride, we will invite others into the lab to sample any leftovers. Faculty and students in the building will be invited. This will alert other people to the quality of your work and introduce them to the culinary world.
4. Leftovers may not be taken from the lab without permission.

**Professionalism:**

1. Positive attitude: A cook with a positive attitude works quickly, efficiently, neatly and safely.
2. Ability to work with people: Food service work is teamwork. Be personable but not disruptive. Share your knowledge and skills with others.
3. Eagerness to learn: Successful cooking requires skill, experience, inquiry and an adventurous spirit.
4. Dedication to quality: Gourmet food is food well-prepared. This requires the knowledge and *desire* to produced quality food.
5. Understand the basics: In order to be innovative, you have to know where to start from. Develop a solid grounding of vocabulary, techniques, methods and ingredients.

**Personal hygiene and safety:**

1. You must have the FN apron. These can be purchased from the HP/HD office. All clothing must be clean.
2. All hair must be pulled back and covered with the chef’s beret. Your beret should be in place before entering the food lab.
3. Only **short** sleeve shirts will be allowed in the kitchen. No hooded shirts will be allowed.
4. Do not work with food if you have any communicable disease or infection.
5. You must wear closed toe shoes and socks.
6. Wash hands and exposed parts of arms before work (20 seconds) and as often as necessary during work.
7. Cover coughs and sneezes and then wash hands.
8. Keep your hands away from your face, eyes, hair and arms.
9. Keep fingernails clean and short. Do not wear nail polish or fake nails.
10. Do not chew gum while in the lab.
11. Cover cuts or sores with clean bandages and use work gloves.
12. Do not sit on worktables.
13. Keep all books, bags, etc. in lockers. You may bring in the CIA text (one per lab unit), the lab assignment sheet and a sheet for notes. Keep all notebooks in your lockers.
14. Students who are not properly attired or who do not follow personal hygiene will not be allowed to participate in the lab that day nor can the lab be made up.
15. "Keep fingernails clean and short. Acrylic or fake nails and nail polish are not permitted in lab and will result in dismissal from the lab. There are no opportunities to make up for missed lab points."

**Sanitation and organization:**

1. All equipment must be sanitized and stored properly at the end of the lab.
2. All work surfaces must be cleaned and sanitized using the following procedure: wash with a detergent solution, sanitize with the sanitizing solution and a clean cloth used only for this purpose, air dry.
3. Your lab station must be checked by the instructor for cleanliness and proper storage of equipment before leaving the lab. Points will be lost after the first lab if equipment is misplaced.

**Grading:**

1. **Labs points include attendance and the lab report. No opportunity exists for making up missed labs. The total lab points are calculated considering one missed lab or dropping the lowest lab score, if all the labs are attended.**
2. **If you are not following the safety procedures, including required attire, you will be given one warning, the next time this occurs you will be dismissed from lab and forfeit the points.**
3. Each lab unit will be assessed on preparation, efficiency, thoroughness and quality of the product.
4. Sustainable practices are also considered. This include placing foods not utilized in containers to be refrigerated, putting produce in the stock pot or when appropriate, the compost bucket. This also includes recycling all possible materials rather than in the garbage. Sustainable practices also include peeling and cutting to utilize as much of the raw product as possible or using a rubber scraper to remove as much from a pan or bowl as possible. These practices are both economically and environmentally sustainable.
5. Individually, you will be responsible for preparing a lab report.
6. Lab principles and questions will be included in the exams.
7. It is expected that you will improve in culinary technique, focus and sustainable practices as the lab progresses.

**\*Mise en place**

Mise en place is the primary organizational principle in all cooking. It means “everything in its place”. It is as much a mental organization as a physical one. Arrange to have as few distractions as possible. Minimize conversation or you will may make a mistake or miss an ingredient. Successful cooking requires focus.

Key steps to mise en place:

* Know the organization of the kitchen. Become familiar with the type of equipment, its appropriate use and where it is stored. Keeping a well-organized kitchen can save time and increase efficiency. Be sure to return equipment to its place, it is your responsibility at the end of each lab to have equipment returned to the correct cabinet or drawer.
* Prior to lab day, read the instructions from start to finish and visualize how you will accomplish each step. This will help with mental organizing of the work distribution in your team and the timing of the food preparation. Determine the principles which underlie the food preparation. Visualize each step of the recipe and the transformation of the ingredients so that you know what to expect.
* Assemble your tools.
* Assemble your ingredients.
* Wash, trim, cut, prepare and measure your raw materials.
* Prepare your equipment (preheat oven, line baking sheets, etc.)