

# Human Nutrition & Foods 353: Food Service Systems Management

## Lecture: MWF 9-9:50 a.m. in AGS-E G101

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*Please note e-mail is checked once a day (in the morning Mon-Fri). If it is a question that needs an immediate answer please call the office number provided.*

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**Graduate Teaching Assistant: Emilie Burgess:** [esburgess@mix.wvu.edu](mailto:esburgess@mix.wvu.edu)

### Required Materials:

- 1. ServSafe Manager Exam Seat Code**
  - **Order online: Cost \$36.00**
  - Electronic Voucher SSONLINEX
- 2. ServSafe Allergens Online Course & Assessment**
  - Order online (ALLERGEN1) Cost \$22.00
- 3. ProSim Restaurant Simulation**
  - **Cost: \$39.93**      **Course Key: WT5LQ3**
  - <http://www.knowledgematters.com/hospitality-simulations/prosim-restaurant-management/>

### Reference Text

- **Introduction to the U.S. Food System: Public health, environment and equity**
  - ISBN: 978-1-118-06338-5
- **Foodservice Organizations: A Managerial and Systems Approach, 8<sup>th</sup> Edition.** Gregoire.
  - ISBN-10: 132620812
- **ServSafe**
  - Manager Coursebook with Online Exam Voucher, 5<sup>th</sup> Edition, Updated with 2009 FDA Food Code.
    - ISBN-10: 0135107318

### Course Description:

HN&F 353 is a three credit hour course designed for students who are majoring in Human Nutrition and Foods. It includes a didactic component, a hands-on experience in a food service setting and an application of course information using simulated case studies. This course will introduce students to the history and types of food service operations, quantity food production and service, maintenance and design of physical facilities for foodservice, and the responsibilities of administrating a food service operation. The foodservice systems model will be studied to determine its significance as a framework for management in foodservice operations.

### Course Competencies and Student Outcomes:

The entry-level dietitian should be knowledgeable in certain areas. These areas include communication, physical and biological sciences, social sciences, research, food, nutrition, management and health care systems. The foundation of DPD learning has two parts: (1) knowledge of a topic as it applies to the profession of dietetics and (2) ability to demonstrate the skill at a level that can be developed further. This course provides the student with knowledge and with opportunities to demonstrate skills relating to foodservice systems management. Upon completion of this course, students will be able to:

1. Describe the foodservice systems model.
2. Explain the systems theory concept and describe the importance of quality improvement in a foodservice operation
3. Define quality and describe the process of achieving quality in the foodservice operation.
4. Discuss the menu planning process, describe various types of menus used in foodservice operations and explain the impact of the menu on all components of the system.
5. Compare and contrast the characteristics of the different types of foodservice operations and describe the food product flow in each.
6. Describe the activities of purchasing, receiving, storage, and inventory control in a foodservice operation.
7. Write specifications for food and equipment procurement.
8. Discuss market regulation through federal legislation. Name state and federal agencies responsible for safeguarding the food industry.
9. Identify pieces of foodservice equipment and describe how they might be used.
10. Demonstrate the ability to standardize recipes to meet a particular purpose in a foodservice operation.
11. Describe the planning and monitoring of the safety, sanitation, and maintenance elements for the foodservice system.
12. Describe the roles and functions of managers. List and explain the five functions managers use to coordinate activities in foodservice organizations.
13. Define strategic management and explain how it differs from long-range planning.
14. Compare and contrast multiple theories of leadership. Compare and contrast leaders and managers.
15. Describe the communication process and identify strategies for improving communication.
16. Define human resource management and describe the activities involved in human resource planning.
17. Define terms related to labor relations, such as collective bargaining, union steward, mediation and arbitration.
18. Analyze the productivity of a work unit and make suggestions for improving the productivity.
19. Identify techniques used to control costs and to make sound financial decisions in foodservice systems.
20. Describe outcomes of the foodservice systems model. List methods of measuring outcomes.
21. Define marketing and identify marketing terms used for foodservice operations. Discuss service marketing and its application to the foodservice industry.

**Social Justice Policy:**

West Virginia University is committed to social justice. I concur with that commitment and expect to foster a nurturing learning environment based upon communication, mutual respect, and non-discrimination. Our University does not discriminate on the basis of race, sex, age, disability, veteran status, religion, sexual orientation, color, or national origin. Any suggestions as to how to further such a positive and open environment in this class will be appreciated and given serious consideration.

If you are a person with a disability and anticipate needing any type of accommodation in order to participate in this class, please advise me and make appropriate arrangements with Disability Services (293-6700)

### **Academic Integrity/Dishonesty Policy:**

Academic integrity will be strictly enforced and there will be no tolerance for academic dishonesty. It is essential that a student's grade accurately reflect his/her academic accomplishments. It is the responsibility of the students and the instructor to discourage any type of academic dishonesty, including but not limited to the following:

- Plagiarism/Cheating or copying on examinations, papers and projects
- Forging or altering grades

### **Attendance Policy:**

Attendance is an important part of your course work and prepares you for the expectations of employment. As a future dietetics practitioner, you will be expected to practice dietetics based on scientific principles and current information. Attendance in lecture will help you understand the material. This is one of the required courses for your major so attendance is expected.

### **Adverse Weather Commitment**

In the event of inclement or threatening weather, everyone should use their best judgment regarding travel to and from campus. Safety should be the main concern. If you cannot get to class because of adverse weather conditions, ON AN EXAM DAY you should contact me as soon as possible. Similarly, if I am unable to reach our class location, I will notify you of any cancellation or change as soon as possible (by 7 o'clock/2 hours before class starts), using (MIX/Gmail) to prevent you from embarking on any unnecessary travel. If you cannot get to class because of weather conditions, I will make allowances relative to required attendance policies, as well as any scheduled tests, quizzes, or other assessments.

### **Individual Assignments:**

- **National Restaurant Association Education Foundation**
  - a. **ServSafe Manager:** Take the certification test for the ServSafe program at the designated time set by the instructor. You will receive points if you successfully pass both exams. A score of 75% or better will earn you a 5-year National restaurant Association Education Foundation ServSafe Certificate. You must have the ONLINE voucher to take the online exam.
  - a. **ServSafe Allergen:** This is taken online without a proctor. The student must submit the certificate of completion by the due date.
- **Book review, report and presentation**
  - a. You are to select and read a book related to food systems/agriculture/agro-ecology/organic food or other topics covered in this course. This does NOT include Cookbooks. The book must be pre-approved, in class. You must identify your book in class, during the first month of lecture. There will be a book sign up sheet – and you may not select a book if it has already been chosen by a classmate. You are responsible for reading the book, writing a college-level book review, and report your findings in a 5minute presentation at the end of term. Some suggested authors and information on the book review report can be found in ecampus. Book selections WILL ONLY be accepted in class.
- **ProSim Restaurant**
  - a. **Market Research:** Students explore the use of surveys as a key market research tool. Students select questions for a survey and analyze the results presented in bar graph form. Students then segment their survey data (select respondents by their answer to a particular question), then analyze the characteristics of a sub-group of the population. Students use market research to diagnose a marketing problem and then are challenged to solve the problem.

- b. **Location Selection:** Students take over a struggling restaurant and seek to move it to a better location. They learn how to determine if rents for a property are reasonable given the revenue potential of the area. Students estimate revenue potential from population data and market research data on customer spending habits. Students then use their analysis to find a location that generates profits above a series of target thresholds.
  
- c. **Financial Statement:** Students will read an income statement and identify revenue, profit, and gross margin. Students will compare gross margin to industry benchmarks to identify and solve a problem. Students will read a balance sheet and combine balance sheet data with income statement data to create a key operating metric. Finally, students will use the income statement to identify and solve an expense problem and increase profit.
  
- d. **Menu Design:** In this assignment, students use customer observations and sales reports to identify problems with a menu. Students use surveys and segmentation analysis to redesign the menu. They also use menu matrix analysis to design a more efficient menu. By changing the order of items on the menu, students boost the sales of high margin items. Finally, they adjust both the entrée menu and beverage menu to reach a profit goal.
  
- e. **Pricing:** Students learn how to price menu items. They learn how to price based on food cost and then adjust for items that can command higher or lower margins. Students explore price elasticity of demand and cross-elasticity of demand among products. They conclude the assignment by setting menu prices to achieve a profit goal.
  
- f. **Purchasing and Inventory Control:** Students learn how to set initial purchasing levels based on forecasts of capacity, table turns, entrée sales, and ingredient usage. They then adjust purchasing of some ingredients that are selling out and causing customer dissatisfaction. Next, they adjust for different sales volume by day of the week to dramatically reduce waste from perishables that expire. Finally, students take over the purchasing for a second restaurant and manage purchasing to reach a profit goal.
  
- g. **Layout:** Students identify problems with their configuration of tables and solve these problems to decrease wait times and improve sales. They then identify problems with their kitchen layout based on employee feedback. Students rearrange the kitchen to eliminate bottlenecks. They then observe how the lack of adequate equipment can affect customer satisfaction ratings. Students calculate the required equipment based on load forecasts and throughput capacities. Finally, they take over control of the layout at a second restaurant and apply their knowledge to reach a profit goal.
  
- h. **Staffing:** Students fix staffing problems at a restaurant that is badly overstaffed. They use the income and industry cost benchmarks to calculate the magnitude of the overstaffing problem. Students then estimate the number of customers for the busiest night. Based on estimates of what different staffing positions can handle per person, they will calculate the number of staffers needed at each position. Students then observe problems that can result from understaffing.

Finally, they use what they have learned to set proper staffing levels for all days of the week to reach a specific profit goal.

- i. **Advertising:** Students begin by establishing an initial marketing budget based on the current revenue and industry benchmarks for marketing spending. They then identify a particular target customer demographic and look at media options for reaching that demographic through advertising. Students compare the cost of advertising options to their budget to determine if they are affordable. Finally, students add other media into their marketing mix to reach a specific profit goal.
- j. **Menu Engineering:** In this assignment, students learn how to increase the gross margin and profit of their restaurant by grouping menu items into categories based on their unit sales and margin. They learn to identify Stars, Dogs, Puzzles, and Plow Horses among their menu items. For each category, students learn what to do with those items to improve overall margin and profitability. Finally, they take over the menu at a second restaurant and use their knowledge to increase its profit to a specific goal.
- k. **Turnaround PROJECT:** Students take over a struggling restaurant and restore it to profitability. To achieve this, they follow a systematic approach to identifying and solving problems. This approach is presented as a diagnostic flow chart. Students look sequentially at generating customer demand, fulfilling customer demand, and then fulfilling customer demand cost effectively. Finally, they apply their knowledge and the diagnostic process to turnaround a second struggling restaurant.
- l. **Restaurant Mogul PROJECT:** In this project, students will open multiple restaurants and build a profitable restaurant empire. They begin by following a series of steps to open their first restaurant. These include market research, location selection, menu design, pricing, purchasing, layout, staffing, and advertising. After following the steps, students have created a restaurant that is generating revenue but operating at a loss. They will improve profitability by listening to customers and controlling costs. A troubleshooting flowchart is available if needed. After making their first restaurant profitable, students open one or more additional restaurants to reach a total profit goal for their empire.

**PROSIM Grades are reported in the PROSIM Website as %.**

Points will be awarded for each assignment as follows

100% = 10 points	99 - 90% = 9 points	89-80% = 8 points	79-70% = 7 points	69-60% = 6 points
59-50% = 5 points	49-40% = 4 points	39-30% = 3 points	29-20% = 2 points	<20% = 1point

- **In Class Assignments**

- a. Worksheets and other in class assignments will be used to facilitate learning objectives. These cannot be made up.

**Group Assignments:**

- a. **Eat Real Instagram Video**

- i. Students will work together to make 6 food literacy videos for Instagram. Examples can be seen @eatrealWV on Instagram. Each group member must develop 1 idea

each. The recipes must be standardized, run through ESHA and submitted. Videos must include all food preparation steps. Instructions will be posted on campus.

**b. Farm 2 Table presentation**

- i. Students will work together in groups with a local restaurant to identify local sourcing options and a Farm 2 table meal. Students will present their efforts at the end of the semester. Instructions will be posted on campus.

**Additional Comments:**

Late assignments will have 10% deducted each day, and **will not** be accepted after 1 week past the due date. **Due dates are FINITE.**

Students must be present for all exams. You are required to take all examinations in this course. If you are absent on the day of the exam, you must notify the instructor **PRIOR TO CLASS TIME**. If your absence from a regularly scheduled exam is due to illness, an authorized University activity, or another reason approved by your instructor, you have the opportunity to make up the exam. Missed exams must be taken within 3 business days of the regularly –scheduled exam time. The GTA for this course will schedule an appointment for you to come in.

**Failure to complete the exam within the allotted timeframe will result in a zero for that grade. Failure to take the FINAL EXAM on the scheduled final exam date will result in a zero for that grade.**

**Course Evaluation**

<b>Individual Assignments</b>		
NRAEF – ServSafe	1 @ 15 points	15 points
NRAEF – Allergens	1 @ 10 points	10 points
ProSim Assignments	10 @ 10 points	100 points
Prosim Projects	2 @ 10 points	20 points
Book Report/Presentation	1 @ 20 points	20 points
In class assignments	15 x 5 points	75 points
<b>Group Assignments</b>		
Eat Real Instagram video	1 @ 25 points	25 points
Farm 2 table group project	1 @ 25 points	50 points
Exams	4 @ 100 points	400 points
Total Points		720 points

**Grades:**

Final grades will be based on total points as follows:

<b>Grade</b>	<b>%</b>	<b>Total Points</b>
A	90% - 100%	648-720 points
B	80% - 89.99%	576-647 points
C	70% - 79.99%	504-575 points
D	60% - 69.99%	432-503 points
F	Less than 60%	< 433 points