



Louisiana State University – Baton Rouge School of Human Ecology

Syllabus for **Human Ecology 2014** **Fall, 2004** **Food Fundamentals**
A service-learning course

Instructor: **Judy Myhand, M.S.**

jdonov2@lsu.edu

219 Human Ecology Building and 263 Knapp Hall

Office Hours: 12:30- 4:00 MWF

Phone number: 578-1718

Teaching Assistant: **Caroline Burke**

Community Partner: **Greater Baton Rouge Food Bank**

Contact: **Bonnie Bordelon, comrel@brfoodbank.org**

359-9940 Ext. 200

5546 Choctaw Drive

Baton Rouge, LA 70821

Lecture: 117 Tureaud

MWF 11:40-12:30

Lab: 219 Human Ecology

Section 1 Tuesday 1:30-4:30

Section 2 Thursday 1:30-4:30

Course Description: This is a 4 hour course, which includes 3 classroom hours per week and one 3 hour lab per week. This is a **service-learning** course that also requires 10 hours of community service at the Greater Baton Rouge Food Bank.

Food Fundamentals brings together information in food science, food safety, food economics and nutrition in the classroom. The laboratory experience includes cooking techniques, preparation of a wide variety of foods, food selection and evaluation. For most of you this course serves as the basis for the knowledge and skills upon which you will build as you take more advanced courses. For all of you, this course serves as a life enhancing course. The concept of service-learning allows you to apply the things that you learn in the class and lab to real-life problem solving for the people who use the food bank.

Academic Learning Objectives: After completing this course the student will be able to:

1. Demonstrate a variety of culinary techniques
2. Select a variety of foods
3. Describe the role of food in promotion of a healthy lifestyle
4. Translate nutrition needs into menus for individuals
5. Apply food science knowledge to functions of ingredients in food.
6. Demonstrate basic food preparation and presentation skills
7. List the benefits of pleasurable eating
8. Apply the basic aspects of sensory evaluation of food
9. Describe effective team behavior
10. Plan, organize and evaluate projects
11. Work in teams

Service-learning

This course is a Service-learning Course. You will enhance your academic learning about food, food economics, food ways and food preparation and provide relevant, meaningful service with the community at the same time. We have identified a need in the 12 parish community served by the Greater Baton Rouge Food Bank that can be fulfilled by the application of the material learned in this course. Research has shown that application of course material enhances learning.

It used to be that poverty led to poor nutritional status, low weight, nutrient deficiencies and disease. Food programs like food stamps and food banks were set up to insure that people didn't suffer this fate. Then a different, but equally critical problem, emerged. Poverty still leads to poor nutritional status but now it's combined with obesity and the chronic diseases associated with obesity like hypertension, type 2 diabetes and heart disease.

This problem can be explained, in part, by the fact that while food is available, it is not necessarily healthful food. High calorie, low nutrient (referred to as low nutrient density) foods are available even in our food banks. Consumption of highly processed convenience foods that are often high in sodium, fat and sugar and traditional food ways that include foods with high salt and fat content combine to lead to serious health problems. It can be said that this is an example of poor food economics. Limited resources are being used to supply foods to individuals that do not nourish them but instead reduce their productivity and actually increase their risk of chronic disease.

In this course, Food Fundamentals, we learn all about food. We will apply what we learn to solving some of the problems of poor food economics. I have observed that students are actually the ones served by this kind of experience. Your service-learning activities, assignments and reflections will give you a broader understanding of the role of food and food economics in the lives of the community. In the end you will develop recipes and companion information pieces that will be distributed with the foods from the food bank. I will guide you in the process to help you extract as much from this experience as is possible. Laboratory sessions allow us to engage in active, hands-on learning of food handling skills. The traditional classroom learning will supply information about foods, nutrition, food safety, food economics, and cultural food patterns.

Service-learning Objectives: In addition to the support that the service-learning will provide to your academic learning, I am bold enough to set the following objectives as well. These include all of the learning goals listed in Outcome 4 of the National Flagship Action Agenda 2003-2010. You will:

1. Participate in active learning.
2. Extract meaning from the service-learning experience by reflection and discussion.
3. Apply academic knowledge in the "real world" through activities and projects
4. Address a nutritional or food economics problem in a community with limited resources.

5. Participate in a community social service
6. Describe the Greater Baton Rouge Food Bank and how it functions in the community.
7. Work collaboratively with others in your team and with volunteers and employees of the food bank.
8. Work with diverse populations and constituencies.
9. List and describe the problems of the community served by the Food Bank.
10. Apply problem solving techniques to food and nutrition related problems.
11. Use food science and food preparation skills to develop recipes and companion information pieces for use by people who have limited resources.

The following chart shows how the course goals and the goals of the National Flagship Agenda are met by this course:

Course Objective	Objective met by Service-Learning
Demonstrate a variety of culinary techniques.	Vary the culinary techniques used in preparation of traditional foods to increase the healthfulness, ease of preparation and acceptability of the foods. Prepare recipes in traditional manner Prepare the recipes with healthful changes
Select a variety of foods using criteria for quality, nutritional value, cost, safety, and acceptability.	Select the foods required to prepare recipes keeping in mind cost and acceptability for the particular recipe. Apply principles of good food economics to food and recipe choices so that the foods will fit the needs of the individuals with limited resources.
Describe the role of food in promotion of a healthy lifestyle	Prepare an educational flyer to accompany recipes describing some aspect of food choice or preparation technique that will promote healthier eating by addressing issues related to the foods and their preparation and the way it is linked to disease risk. Maintain the theme of good food economics in the educational flyer.
Translate nutrition needs into menus for individuals	Change the standard recipes to increase their healthfulness in the following ways: reduce sodium, reduce saturated fat, increase dietary fiber, increase vegetable intake, reduce kcal impact, (particularly From added sugars and saturated fats) Reduce reliance on processed foods that often cost more, and have a negative impact on health.
Apply food science knowledge to functions of ingredients in food.	When changing recipes, use knowledge of functions of ingredients like water, sugar, salt, acid and fat in cooking to make appropriate changes in the recipes.
Demonstrate basic food preparation and presentation skills.	Prepare recipes both in the traditional manner and with healthful changes Present the foods for tasting to a taste panel to determine acceptability of changes. One educational tool could focus on healthful food preparation techniques.
List the benefits of pleasurable eating.	When choosing foods to be prepared and recipes, list the benefits of pleasurable eating and insure that the foods and recipes lead to pleasurable eating. One educational tool could encourage pleasurable dining and list the benefits.
Apply the basic aspects of sensory evaluation of food.	Evaluate the overall acceptability of foods prepared using a sensory evaluation score sheet that lists the characteristics that are necessary for acceptability and allow tasters to rank the food. Keep in mind that a key aspect of good food economics is that food that is prepared is eaten so it must be acceptable to the audience.
Describe effective team behavior	Teams will examine their effectiveness within guidelines for effective team behavior. They will observe and report on aspects of team leadership, responsibility, communication and structure through various exercises. The final report will include a description of how the team performed, handled problems, assigned duties.

Our community partner, The Greater Baton Rouge Food Bank (GBRFB) is a non-profit organization that provides food to 100 charitable agencies that operate food pantries, group homes, shelters, meal sites and other special agencies. It serves 12 parishes and helps about 5,000 people a day. The GBRFB provides food to these agencies completely free of charge. To operate efficiently, they employ only 15 full time employees and depend on volunteers to donate their time. Through Human Ecology 2014, you will donate time and service to this agency. In 2004, their mission is to increase nutrition awareness. We will develop, produce and deliver educational booklets that will be distributed with the foods.

The **text** is: Understanding Food by Amy Brown, 2nd ed., Wadsworth

You will also need an acceptable **lab coat**. No color preference or style

preference but those of you in the Dietetics curriculum will want a traditional lab coat in white for future labs. If you are not in Dietetics and don't like the idea of buying a lab coat, a large shirt that covers your street clothes and is kept just for lab is acceptable.

Letter grades are based on a 10 point scale (90%-100% A; 80-89% B; 70-79% C; 60-69% D; below 59% F) Your grade = $\frac{\text{Total Points Earned}}{\text{Total Points Available}}$

Policies:

I will utilize all possible time, so be prepared. You may find this one of the most enjoyable courses that you've ever taken but it does require that you apply yourself. You cannot miss labs and classes and still do well. Each time that you miss a lab, you will lose 10 points and a significant educational experience. I encourage team participation so if there is a problem in your lab group that causes difficulty with team performance, please talk with me about it.

Because of all the opportunities through the semester for easy points (fairly simple stuff) **I don't curve.**

If you miss a test, you may count your final test as double but you may not opt to miss the final exam. If a student shows steady improvement and is consistent with attendance in class and lab, I will replace their lowest test grade with the grade that they get on the final test. Exams and tests are not to be taken from the classroom. If you do take an exam or test from the classroom, even a graded exam, you will get a zero on the exam.

Lab performance will be based on lab reports and also the following:

1. Uses of sanitation standards and cleanliness
2. Time management.
3. Technique and ability to follow directions
4. Attitude
5. Attendance and promptness

Class schedule: There are 42 days of class. Because semesters change, I base the class schedule on days instead of dates.

Day 1 Course Introduction, explanation and introduction to service-learning and syllabus: Schedule your Orientation at the Food Bank. Familiarize yourself with Blackboard. Start reading the textbook about grains. Learn about the Lab Final Project. Learn the requirements of the

written lab report.

Day 2 Grain – Fill out the service-learning pre-assessment. Define grain and list grains and grain based foods. List the nutritive and other health providing aspects of whole grains. What's a phytochemical? Do you eat whole grains? How can we increase our intake of whole grains?

Day 3 Grain – What did you learn in your first lab? Talk about the experience and what was good and what might need to change. Ask questions. Learn how to choose, purchase, store and prepare grain. Start reading about starches, quick breads and yeast breads.

Day 4 Starch – Learn about the different kinds of starch. What is the role of starch in the food plan and the kitchen? What are some of the foods that we eat that are mostly made up of starch?

Reflection 1- What would you do if you had no money for food? How might that happen to someone?

Day 5 Baked goods – Learn about the various kinds of baked goods. Learn the different techniques for preparing them. Learn about the ingredients in baked goods and what role they play. Test is coming up. Don't wait until the last minute!

Day 6 Quick Breads – What would be the benefits and limitations of making homemade baked goods a part of a thrifty food plan?

Day 7 Yeast Breads – Learn about the process of making yeast bread. Review for Test 1.

Day 8 Test 1. 50 points Lab Procedures, Measures, Starch and starch gels, Pasta, Quick Breads and Yeast Breads Reading Assignment: Starch and Sauces 369-381; Cereal Grains and Pasta 383-398; Flour and Flour Mixtures 401-421; Quick Breads 422-428; Readings, along with lab procedures and lab sheet information and other things learned in labs 1-3 will be covered by the first test (See Lab Schedule for more specific information)

Day 9 Vegetables – Make sure you are keeping up with reading! Learn the many different kinds of vegetables. Learn about the nutritive value of vegetables. Learn how to cook vegetables so that they give you their best. Which vegetables do you eat?

Day 10 Vegetables – Diets high in vegetables have been shown to reduce the risk of most (maybe all) chronic, avoidable diseases. **Reflection 2** a. What do you think a cost /benefit analysis of canned vegetables versus fresh or frozen vegetables would need to take into consideration? b. Many canned vegetables (and fruits) are available at the food bank and they are used frequently in the Thrifty Food Plan. However, only about 2% of children in the U.S. meet their recommended servings of fruits and vegetables. Why is that? What can be done to change that? Learn about genetically modified plants.

Day 11 Legumes – Learn about a special group of vegetables that are high in protein. Name many types of "beans". Learn how to cook them and eat them without getting gas. Learn how to use beans in combination with other

foods to replace animal protein in your diet. Ponder and discuss the reasons why you might want to make that change in your diet (at least some of the time)

Day 12 Soups and Salads - Let's eat more of them. Learn why. Learn how to make good soups and salads.

Day 13 Soups and Salads- 100 (or more) ways to increase Vegetable intake and probably time for a little review for Test 2.

Day 14 Test 2. 50 points Lab Procedures, Vegetables, Legumes, Soups and Salads in

Reading Assignment: Vegetables 312-331; Legumes pages 320 and 328-330; Soups and Salads 354-368; You will also be responsible for the information from Labs 4-5.

Day 15 Fruits and Gelatin – All about fruit: fresh, frozen, canned, cooked and raw. Nuts: Did you know that many things that we call nuts are actually a part of fruit. Learn the benefits of nuts in a healthy diet. Learn how gelatin can play an important part in a nutritious diet and how to work with it without relying on the stuff that has all the sugar and food coloring. Don't forget to read about milk for the next class.

Day 16 Dairy – Moo! Learn the role of dairy products in a nutritious diet-- Dairy means way more than just the milk we drink. Learn about probiotics and prebiotics.

Day 17 Dairy – Fun with milk: How to cook with milk and other dairy products. Learn how to properly store dairy products and foods made with dairy products.

Day 18 Dairy – Cheese: There are thousands of different cheeses. Learn how cheese is made and what makes each cheese unique.

Day 19 Dairy – More on cheese: What are the rules for cooking with cheese? Frozen dairy desserts: more fun with milk.

Reflection 3 – to be announced.

Day 20 Test 3. 50 points Lab Procedures, Dairy and practical information on fruit and gelatin, Reading Assignment: Milk 202-219 Cheese 220-232. Fruit 334-353 You will be responsible for information from Labs 6-7. Frozen Desserts selected readings from 486-495.

Day 21 Eggs – Eggs! what are they good for?! Absolutely everything (almost). Learn about structure, nutrients, functions in cooking.

Day 22 Eggs – Learn more about eggs, including how to tell if an egg is fresh and egg safety.

Reflection 4 – Write for 10 minutes on thoughts that you have had about service-learning, food bank, poverty, or other related topic.

Day 23 Eggs – Learn how to cook eggs. There are many special rules.

Day 24 Eggs – Learn even more about eggs

Day 25 Eggs – Learn about processed egg products. Review for test.

Day 26 Test 4. 50 points Lab Procedures, Eggs Reading Assignment:

Eggs 233-250 You will be responsible for information from Lab 8.

Day 27 Meat – Learn about the composition, nutrients and complexity of meat.

Day 28 Meat - Mad cows, fat cows, cows that take hormones...

Reflection 5 – Changing food ways usually meets with resistance. When we make the educational flyers for the food bank, one of the things we are going to be trying to do is change deeply rooted food ways. Write about your feelings about changing your own eating habits. If you have any ideas about how we can increase the likelihood that change will take place, write about them.

Day 29 Meat/Poultry – Learn how to insure that meat is tender, moist, safe and flavorful. Learn about poultry composition and nutrients. A chicken has many parts.

Day 30 Poultry – Learn how to cook poultry and make sure that it is safe.

Day 31 Seafood – Learn about seafood composition, nutrient and special role in a nutritious diet. Learn the special cooking requirements. Do you eat raw fish? (Sashimi) Make sure you know the risks.

Day 32 Test 5. 50 points Lab Procedures, Meat, Poultry and Fish Reading Assignment: Meat 251-278, Poultry 279-292, Fish and Shellfish 293-311. You will be responsible for information from Labs 9-10.

Day 33 Fats and Sugar Learn about ingredients like fats and sugar.

Day 34 Herbs and flavor development Learn more about ingredients like fats, oils and sugar but also herbs, spices and other things.

Reflection 6 – Many processed foods are high in the ingredients fat, sugar and salt which increase our risk of chronic diseases. Even when they can barely scrape by to feed their family, some mothers feel like they are good providers because they can give their children these foods instead of fresh whole foods. How does a food get status? Brainstorm on how we might turn this lethal situation around.

Day 35 Making candy and using the microwave– Am I really going to teach this? Yes, I am.

Day 36 Food Safety Round-up – We've learned about food safety all semester and now we will bring it all together.

Day 37 Food Safety Round-up -- *In class assignment:* Apply HAACP to Thanksgiving.

Reflection 7 – Do you feel like the foods and food handling procedures at the food bank are safe? Would you eat the food?

Day 38 Test 6. 50 points Lab Procedures, Fats and Oils, moldable dough and cakes, Sugar Cookery, Chocolate and Heating Foods. Reading Assignment: Fats and Oils 181-201, Sweeteners 166-180, Cakes and Cookies selected readings from 444-455, Pies and Pastries selected readings from 456-470, Candy and chocolate selected readings from 471-485, Beverages selected readings from 496-507. Heating foods selected readings

from p. 98-100 and p. 119-121. You will be responsible for information from Lab 11-12

Day 39 Meal Management – The big picture: Now you know how to cook just about everything but how do you go about turning that into nutritious meals?

Day 40 Meal Management – Good Food Economics

Reflection 8 What do you think about people who utilize the food bank?

Day 41 Meal Management – Nutrition *In class assignment:* Using the guidelines of good food economics, plan a meal for a family of 4 (This is a review for the Final Exam)

Reflection 9 Increased incidence of many chronic diseases is caused by poor nutrition. People live a lot longer now because of improved health care but often they are in poor health because of poor nutrition. This is a costly situation. What can we do about it?)

Day 42 Service-Learning and Course Evaluation, Lab Final Project due.

Reflection 10 – *to be announced*

Final test: Flavor Development, Meal Management and Food Safety. **Final**

Exam: This exam can be considered cumulative because the information covered in the last part of the course utilizes previously learned topics. You will be responsible for applying knowledge gained in **service-learning**
Reading assignment: Selected readings in chapters 3, 4, 6. The final covers information from Labs1-13

Reflective journals

- **During the semester there will be 10 directed entries into your journal and other opportunities for making entries. There will be specific guidelines and criteria for the journal entries and I will collect them after each entry and evaluate them so they need to be in a booklet or notebook that is separate from your other notes.**
- **The goal of reflecting is to increase the meaningfulness of the experience of service-learning. Initially the reflections will direct you in learning how to observe, listen and seek feedback. I will give you feedback and direction. As time progresses I will look for evidence of these competencies in your reflections and for mindfulness in thinking.**

Individual Assignments:

- 1) Keep a food diary and evaluate it
- 2) Lab Reports

Team Assignments:

- 1) Using what you know about food economics, develop Consumer Judging Tests for 4-H- teams will develop scenarios for the 4-H members to judge. These will be graded based on accuracy, educational value, appropriateness for age group, how well they reinforce what was taught and creativity. (20 points)
- 2) Recipe development – Teams will write recipes and will be graded on creativity, how clear the instructions are and the application of Good Food Economics, (things like flavor development, acceptability, cost and healthfulness). (20 points)
- 3) Plan Lab 12 – Each section will plan an Economical (cost per meal and cost per serving) Nutritious, Cultural and Fun Menu (within a budget), including market order, place settings and ambience. These will be graded based on accuracy, creativity, and application of Good Food Economics. (10 points awarded for enthusiastic group participation)
- 4) Final Service-Learning Project - See the Lab Final Sheet for the details

In class activities: HAACP Thanksgiving, 100 ways to get your vegetables, How to feed a family of four according to good food economics

Lab Schedule:

Lab 1 Lab Procedures and the principles of measurements and heat transfer

We will make muffins and learn our way around the kitchen lab.

Subjective evaluation: p. 3-5

Time management: notes from lab

Heating foods: See pictorial summary on p. 117

Measuring ingredients p. 115-116

Food Preparation Utensils p. 114

Effective Team performance: notes from lab

Lab 2 Starches, Sauces, Cereal Grains and Pastas and the principles of gel formation in starches and separation of starch to avoid clumping

We will prepare a variety of grains and foods made from grains and flours.

Starches and sauces p. 369-381

Cereal grains and pastas p. 383-398

Individual responsibility in teamwork: notes from lab

Lab 3 Quick breads and Yeast breads and the principles of leavening and gluten formation

We will prepare various breads.

Flours and flour mixtures p. 401-419

Quick breads p. 422-428

Yeast breads p. 430-441
Mixing techniques p. 127-128
Team Organization: notes from lab

Lab 4 Vegetables and the principles involved in softening vegetable fibers, and maintaining color and texture in vegetables

We will prepare a variety of vegetables and learn about using a knife and other tools for preparation.

We will start sprouting the beans and seeds for next lab (see page 328-329).

Vegetables p. 312-331
Cutlery techniques p. 123-124
What happens when you change team organization: lab experience

Lab 5 Legumes, Sprouts, Soups and Salads and the principles behind hydrating and softening vegetable proteins, proper handling of fresh salad ingredients and making stocks and broths.

We will prepare various beans as that can be main dishes for any meal, in soups and salads and as snacks. We will also work with products made from legumes (like tofu and miso)

Preparing legumes p. 328
Soups and Salads p. 354-367
Tofu p. 227
Cultural food patterns with legumes

Lab 6 Fruit, Gelatin and Frozen Desserts and the principles involved in cooking fruit to attain the desirable color and texture, making gels from gelatin, making a gelatin foam and crystal formation in frozen desserts

We will prepare fruit, both dry and fresh. We will make sorbets, water ices and dishes that contain gelatin.

Fruit p. 334-351
Gelatin p. 364-366
Sorbet and water ices p. 488-494
Communication in teams: notes from lab

Lab 7 Milk, Cheese and Ice Cream and the principles involved in cooking with milk and cheese, coagulation of milk proteins, fermentation and crystal formation in dairy desserts.

We will prepare many different dishes where the main ingredient is a dairy product.

Milk p. 202-217
Cheese p. 220-231
Ice Cream p. 486-494
Frozen Desserts p. 488-494
Making an implementation plan: notes from lab

Lab 8 Eggs and the principles involved in cooking eggs, forming an

egg based gel, using egg white foam as a leavening agent

We will prepare a variety of dishes using eggs as the main ingredient. This includes using egg whites to make cakes such as angel food and sponge cakes and using egg yolks to thicken sauces.

Eggs p. 233-249

Cakes p. 109-110; 449-450

Writing a recipe that is easy to follow: p. 90-91 and notes from lab

Lab 9 Meat: Beef, pork and lamb and the principles involved in hydrolysis of connective tissue, changes in meat pigments, browning of meat and safe handling of meat.

We will learn various methods for preparing meat. We will learn about the importance of thermometers. We'll make a little candy, too.

Meat p. 251-276

Thermometers p. 273-274; 100, 269

Candies 471-484

Lab 10 Poultry and Seafood and the principles involved in hydrolysis of connective tissue, preparation of moist meat, changes in pigments, and safe handling of poultry and various types of fish and shell fish

We will learn various methods for preparing poultry, finfish and shellfish. For a little variety, each group will also make some candy and learn about crystallization.

Poultry p. 280-291

Fish and shellfish p. 293-309

Crystalline candy p. 473-476

Lab 11 The role of ingredients like Fats and Oils, Sugar, Salt, and Acids.

We will make emulsions, dough and batter and observe the characteristics of plastic fats, and liquid oils. We will make candy. We will observe the role of salt and acid in recipes. We will examine formation of gluten and using fat to control gluten formation.

This lab is a no-fry zone so we don't fry foods. However, there are many other ways that fats and oils are used in cooking. We will practice having a taste panel by replacing solid fats with other products (oils, and fat replacements like fruit purees) in baked products and then comparing them. We will adjust sugar and salt in recipes and test them, too.

Fats and Oils p. 181-199

Shortened Cakes p. 446-448

Cookies p. 450-452

Pies and Pastries p. 456-479

Candy p. 471-484

Taste panels: notes from lab and experience

Plan for lab 12 and lab final: writing a nutritious, economical menu and market order. Notes from lab

Lab 12 Free choice and Flavor Development

We will use all that we have learned to bring together a wonderful final meal in our lab. We will practice the finer arts of dining: presentation, flavor development, balance and contrast and manners. After that, we will get the lab straightened and ready for the Lab Final.

Seasonings and Flavorings p. Appendix D 129-133

Plate presentation

Food selection and Evaluation p. 5-13

Meal Planning and Budgeting p. 81-95

Lab 13 Lab Final-

This is it. The lab final allows you to show me all that you have learned and allows you to apply the knowledge and skills that you gained in this course, including your service-learning experience. It sounds like a lot but it's a team project and I know you can do it.

Lab Final Fall, 2004 HUEC 2014 Service-Learning Project 100 points

Using what we've learned to prepare a nutritious, delicious recipe for a specific individual.

Requirements: Market Order and Recipes: Due

Preparation on:

Presentation on:

Evaluation and complete project:

1. You will develop an implementation plan: I like to use a calendar format. Assign deadlines, priorities and people to the various parts of the project in your implementation plan. It works best if you also plot out a path that indicates what needs to be done first so you can establish a timeline for achieving your objectives. You will also be defining the scope of the project and setting your priorities as you initiate the development of this plan.

Here are some of the objectives:

a.) Define the culture: Write a paragraph that describes the cultural food patterns of individuals

b.) Describe the problem: Write a paragraph that describes the nutritionally

based problems and economic problems that exist for the greatest percentage of individuals in the group.

c.) Investigate the food resources and determine foods that are available. [Work for 10 hours at the food bank.]

d.) Develop recipe: You will develop a recipe that is appropriate for your person's cultural food practices and meets their special nutrient needs. This should be creative and varied, utilizing the things we've learned in class about providing variety in foods, but the most important requirements are that it fit the problem and meet nutritional requirements. The recipes should be well and clearly written so that a person with little cooking experience could prepare them.

The recipe requirements:

1. Be nutrient dense

2. Meet the "problem" nutrient needs (to be decided). This part will require justification.

To make sure that it meets these requirements, you will need to do a nutrient evaluation using Calculations of the % kilocalories from fat, protein and carbohydrate presented in a chart form followed by a paragraph that describes the chart.

Nutrient content of the recipes including fiber content, saturated fat and added sugars. (Also in chart format: How clear do you think that charts that are available from the software are at showing the differences between your recipes? Make sure that your chart is simple and clearly compares the recipes). Include a paragraph that compares the nutrients in the recipes.

e.) Write a Market Order. A market order is a list of ingredients required for your recipes. It will contain the exact ingredients and the exact amount needed for the recipe and 2 variations. Record the cost of each item and total the cost of your recipes. We have some staple ingredients but you must list them so we will put them out (that includes salt and dry herbs and things like that).

f.) Determine a cost per recipe and cost per serving for the recipe: Go to the grocery store to get the prices of the foods in your recipes. Calculate the cost of each recipe and divide it by the number of servings that the recipe makes. For recipes like a salad that can be prepared in one serving, you will prepare one serving. For recipes like muffins or a quick bread, that can't be prepared in one serving, you will prepare the whole recipe or, if it can be easily halved, you will halve it. Talk to me if you have questions.

3. Prepare the recipes in lab using all the proper skills learned this semester.

4. You will properly taste test the recipes. I will participate in the testing. Be prepared to answer questions about preparation, food safety, the

problem, the ethnic foods and the dietary requirements for the individual and how your recipe solves the problem.

5. You will do a lab report as usual only you will be comparing 3 recipes.

6. You will create an educational flyer that can be made into a deliverable for the food bank using information from your lab final.

7. You will evaluate the final product and process and make conclusions and recommendations

The grading sheet that I use has 6 parts and each part has certain requirements as follows:

Recipe: Nutritious, clearly written and easy to implement, appropriate to address the chosen problem. You will evaluate the recipe for nutrients (20)

Market Order: Complete, addresses economical requirements (10)

Implementation Plan: Complete and available for review by me on the day of the final. (10)

Food preparation: Food safety and handling, skills, time management (15)

Presentation: Attractive, good flavor development and varied textures, good explanation of problem and how you met the requirements. I will taste and evaluate your recipes. Don't forget that I think it is important that it look nice as well as taste good. You will be talking to me and I will ask you some questions so be prepared. (15)

Lab Report: (10)

Educational Flyer: (25)

Evaluation and Conclusions: (20)

Note on Grading: Each individual will receive a grade but I only need one project from the group. This enables me to take points off one participant who is, for example, late for lab while not penalizing the others in the group.

You will evaluate your team performance in class on the day of the class final. This team evaluation will be your independent work. (10 points).

Test Schedule, topics and reading assignments for each test: Tests are on Mondays or Fridays and the testing schedule goes like this:

Date of test

Test 1	Sept. 10	50
Test 2	Sept. 24	50
Test 3	Oct. 11	50
Test 4	Oct. 25	50
Test 5	Nov. 8	50
Test 6	Nov. 22	50
Final Test	Dec. 11, 2004 12:30-2:30	50
Final Exam	Dec. 11, 2004 12:30-2:30	100
Lab Performance		120
Lab Final	Nov. 30 and Dec. 2	110
Reflective Journal discussion and other Total		<u>120</u> 800

Tests will cover all **notes from class** and **lab** plus **lab experiences** and information from **lab sheets** and **lab reports**. You will also be responsible for **assigned readings** from the book. This book has some excellent figures and tables plus definitions of key terms and something called Pictorial Summary which is just great. If you do nothing else before you come to class, read these summaries.

I use **Blackboard** (an Internet based support tool) for course information, communication, course calendar, review, and assessment. I also use Internet sites for recipes for the laboratory. For this reason, you need to have access to a reliable computer preferably with a printer. If you don't have this, let me know.

Recycling and Using Ecologically Sound Practices in the Lab

This semester we are going to recycle and use other sound ecological practices in our lab. It is a valuable habit. It will mean that I will buy foods in recyclable packaging and use fresh foods as often as possible. It will mean that we will have three choices for disposal of used items:

1. Paper and Cardboard
2. Cans, plastic and cartons (**these should be rinsed clean**)

3. The trash can

If this works well, I will start composting plant matter. I will also show you some water conserving methods for washing dishes and give gentle hints about not allowing water to run.