

JOINT COURSE PROJECT FOR UNDERGRADUATE RESEARCH SYMPOSIUM

Working together with students from BIOL, PATHO, and NUTR, you will work in groups of 2 or 3 students per class to make teams of 6 to 8 people.

Plants translate the energy of the sun into fuel for humans. Humans cultivate plants for food and to make livestock feed which is converted into foods from animal sources by the animals themselves. Consumers often do not fully understand the botanical, nutritional, or health aspects of foods they consume. This project will provide information to consumers of locally grown food plants that ranges from information about the plant, nutrient content and recipes using the food from the plant(s), and health and disease prevention benefits of the food(s).

The overarching goal of this project is to research the plant, nutrition, and disease preventing qualities of a plant food that is offered for sale at the North Asheville Tailgate Market (NATM) and to create an interesting and informative table display to be presented at the Undergraduate Research Symposium. Your display may also be shown at the NATM over the course of the market season.

NUTRITION STUDENTS: Will identify nutritional content of foods from the plants; create or find recipe examples for using the foods. Analyze the nutrient content of the recipes. And offer suggestions for ways to incorporate this/these foods in a healthy diet.

PATHOPHYSIOLOGY STUDENTS: Will identify benefits of consuming the foods from the plant(s) researched for the prevention or management of at least (may be more) chronic diseases. You may need to think of or locate the food in the context of a days' menus or a whole diet in order to illustrate its contribution to disease prevention and management.

BIOLOGY STUDENTS: Will research explanations of the plant's history of domestication, similarity and differences with respect to wild relatives, where the plant originated, what parts of the plant are used, how humans have selected for features of the plant that are considered favorable, etymology and significance of scientific and common names, advantages and disadvantages of hybrid and heirloom varieties, adaptations of the plant to climate and day length, pests and diseases of the plant, cultivation requirements, historical and cultural significance, or other botanically or biologically-related topics they find interesting and significant.

TOGETHER NUTRITION, BIOL, AND PATHO STUDENTS WILL ASSEMBLE THE INFORMATION GATHERED FROM THEIR RESEARCH INTO A POSTER AND INTERACTIVE DISPLAY FOR THE UNDERGRADUATE RESEARCH SYMPOSIUM ON XXX.

JOINT CLASS DEADLINES (note that each class may have additional other deadlines)

- Sign up for a plant/plant food by XXX.
- Abstract deadlines; draft due XXX; final due by noon on XXX.
- Nutrition Students: Recipes and Nutritional Analysis due: XXX (in class),
- Undergraduate Research Symposium, XXX; table display due and presented (everyone is required to attend)
- Research Portfolio due: XXX

Team Tasks

1. Your team must submit a draft of your abstract to the Food for Thought faculty by XXX. The final abstracts are due by email on XXX. Your faculty will submit the paperwork to the Undergraduate Research Office. Abstracts of 200 words or less should include the following:
 - Title
 - Names of all authors
 - Undergraduate Research Advisors
 - The Abstract text, including:
 - Background: why is this display needed?
 - Purpose: to improve food and nutrition literacy of viewers (elaborate)
 - Methods: what will your group do or show
 - Discussion: what do you plan to accomplish with the display
2. Final product will be a table display at the Undergraduate Research Symposium (XXX) that may later be used at the North Asheville Tailgate Market held each Saturday at UNCA.
 - should be eye-catching and professional
 - should offer opportunities for participant interaction
 - should include at least one takeaway handout
 - creativity is encouraged
 - tables are 5 feet long, and we will supply an upright poster of white foam core (trifold, 36" high x 48" wide) for you to use.
3. A research portfolio for the group should be turned in by XXX. It should include:
 - your team's abstract

- BIOL students - the research paper you turned in on your plant
- NUTRITION students - a table and description of the nutrient content of the food(s) from the plant you are investigating, two or more recipes with nutritional analysis, other ideas of healthful ways to use the food
- PATHO students-a brief (2+ page summary) of the research you found on the health benefits of this particular plant or on nutrients that this plant food is rich in; a menu or meal plan that includes the food and is health-promoting for one or more chronic diseases