

## NFS 213: Food Microbiology Laboratory Experience

**Time/Location:** 257 Marsh Life Sciences Building  
50 minute labs meeting three times per week (MWF)

**Professor:** Dr. Todd Pritchard (aka “Dr. Todd”)

**Office:** 352 Marsh Life Sciences  
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**Office Hours:** By Appointment. Send Email with request for meeting.

**Number of Credits:** 1.0

**Prerequisites:** None

**Course Description:** This course is a course on evaluation of foods for microbial content as well as the development of proper microbiological techniques such as Gram Stain, Microscopy, Streak for Isolation, Aseptic Technique, Dilutions, Plating and Counting Rules for bacteria.

**Required Materials:** There is no required book for the course. Lab experiences have been generated by the teacher and will be posted to Blackboard. Students will be responsible for printing off their own copies of the materials.

**Course Format:** This will be an experiential learning course.. Students will be expected to read materials beforehand and to have pre-labs written for review.

Each week students will be presented with experiments for development of good laboratory practices as well as procedures for the microbiological analysis of foods.

**Grading:** The grading of the course will be based on proper preparation of pre-labs, attendance, answering of question sets based on lab experiences as well as a lab practical portion in which students will be critically evaluated for their technique.

A student project will also be included in the grading. Students will identify an experiment that is based on food microbiology/food safety. They will develop a hypothesis, experimental design, perform the experiment, evaluate the results and present to other students via a 15 minute Power Point presentation.

Students will also be graded based on reflections of the Power Point presentations they attend.

I do support the use of ACCESS/SAS when appropriate and leave it to the student to follow through on getting paperwork together as well as meeting with me to discuss accommodations.

**Course Objectives:** Upon completion of the course, students should be able to perform basic lab techniques such as staining, microscopy, streak for isolation, aseptic technique, dilutions, plating of food samples and counting plates to determine microbial load of foods