

**Online Egg HACCP Course Syllabus**  
**Auburn University**  
**Laura J Bauermeister, PhD**

**Program Description** - The programs are divided into seven individual learning modules that guide participants through the steps necessary to create a HACCP program as well as the supporting programs, such as Good Manufacturing Practices (GMPs) and Sanitary Standard Operating Procedures (SSOPs). The learning modules will contain power point presentations with an audio lecture. The power point presentations will also be provided in a handout format with 3 slides per page and an area for notes, students will be able to print these before listening to each lecture. Each learning module is also followed by an assignment that participants will be able to complete and use in the development of their company's Pre-requisite programs and HACCP plan(s). The learning modules will also include a quiz so that we can monitor a participant's progress and the effectiveness of the course. There is a supplemental learning module that provides participants with many reference materials that they will be able to use in the development of their full HACCP program. Participants will complete a test at the end of the course with a grade of 80% or greater to get a certificate with the International HACCP Alliance seal.

**About the Instructor -**



**Laura Bauermeister, PhD**

Research Associate, Department of Poultry Science  
Certified as Lead Instructor by the International HACCP Alliance

American Egg Board 2006 Food Science Fellowship Recipient. This online Egg HACCP course was developed as a partial fulfillment to the 2006 Food Science Fellowship provided by the American Egg Board.

**Program Goals** - To give industry personnel working knowledge of HACCP principles and pre-requisite programs so that they will be able to develop and implement an effective HACCP program based on scientific principles.

**Program Objectives -**

- Develop pre-requisite programs to support the HACCP program
- Develop and be able to implement and effective HACCP program
- Be able to identify validation procedures to determine the ongoing effectiveness of the program

**Agenda -**

1. Learning Module 1 - Introduction to Egg Processing
  - a. Egg Processing and Further Processing Lecture
  - b. Writing Assignment**
    - i. Create a flow diagram of your processing facility. This will be used as a part of your HACCP plan.
  - c. Quiz over learning module 1

2. Learning Module 2 - Introduction to HACCP and an Overview of Hazards
  - a. Introduction to HACCP Lecture
  - b. Biological Hazards Lecture
  - c. Physical and Chemical Hazards Lecture
  - d. Writing Assignments**
    - i. Create a HACCP team and define the team member role.
    - ii. Create a product category description for your egg product. In creating your product category description you will need to list the name of the product or a description of the product, what the intended use of the product is, type of packaging, shelf-life, storage temperature, labeling instructions and if special distribution instructions are needed. There is a sample form attached to this assignment that you can use. You may use another format, however all the information needs to be included in an alternate format.
    - iii. Create an Ingredient List for your egg product. When creating your Ingredient List, you will need to list your product category again at the top of the page. Then identify the egg ingredients in your product and all the non-egg ingredients used in your product. If your product contains any restricted ingredients you will want to list those separately. Also, you will need to list the packaging materials that are used since these will come in direct contact with the food product.
  - e. Quiz over Learning Module 2
3. Learning Module 3 - Pre-requisite Programs
  - a. Good Manufacturing Practices (GMPs) Lecture
  - b. Sanitary Standard Operating Procedures (SSOPs) Lecture
  - c. Writing Assignments**
    - i. Review your current Good Manufacturing Program (GMPs) and update any necessary information in the program. If you don't currently have a GMP program please create one.
    - ii. Create (or review an existing) Sanitary Standard Operating Procedures (SSOPs).
  - d. Quiz over Learning Module 3
4. Learning Module 4 - Hazard Analysis and Critical Control Points
  - a. HACCP Principle 1 - Hazard Analysis Lecture
  - b. HACCP Principle 2 - Critical Control Points Lecture
  - c. Writing Assignment**
    - i. Conduct a Hazard Analysis to identify all possible biological, physical and chemical hazards that could be found at each production step listed in your flow diagram.
    - ii. Determine your Critical Control Points to determine what the final point of control for each biological, physical and chemical hazard is. Note: there may be more than one type of control in a process.
  - d. Quiz over Learning Module 4
5. Learning Module 5 - Critical Limits, Monitoring and Corrective Actions
  - a. HACCP Principle 3 - Determining Critical Limits Lecture
  - b. HACCP Principle 4 - Monitoring Critical Limits Lecture
  - c. HACCP Principle 5 - Determining Corrective Actions Lecture
  - d. Writing Assignment**

- i. Using the templates provided to you or another form that contains all pertinent information, develop a Critical Limit for each one of the critical control points identified in learning module 4. For each critical limit identify the appropriate monitoring procedures and what corrective actions would be appropriate when a deviation occurs.
        - ii. Identify the source of the information you used in determining your critical limits. We have included resource items in the supplemental information section to help such as USDA regulations, International Egg Pasteurization Manual, scientific articles and other information.
      - e. Quiz over Learning Module 5
- 6. Learning Module 6 - Record Keeping and Verification
  - a. HACCP Principle 6 - Record Keeping Activities Lecture
  - b. HACCP Principle 7 - Verification Activities Lecture
  - c. Writing Assignment**
    - i. Using the HACCP form templates provided to you or another form that contains all the pertinent information, determine what records will be kept for each critical control point and what procedures will be used in the verifying that you are controlling potential hazards from entering your food system. Example verification procedure will be provided in learning modules.
    - ii. Create a HACCP Summary Table to go with your HACCP program
  - d. Quiz over Learning Module 6
- 7. Learning Module 7 - Sanitation and Validation
  - a. Sanitation Program Lecture
  - b. Validating Your HACCP Program Lecture
  - c. Writing Assignment and Activities**
    - i. Identify steps that you could use to validate the effectiveness of your companies HACCP program.
    - ii. Using the checklist provided, audit your HACCP program to determine if you are missing anything that could strengthen your program.
    - iii. Review your pre-requisite program(s) to determine if there is information you could add anything to strengthen this program.
  - d. Quiz over Learning Module 7
- 8. Final Exam - Must complete with a score of no less than 80% correct answers.

### **\*Reminder\***

**All course materials must be completed, including assignments, quizzes and Final Exam before HACCP certificate will be mailed.**