First Day - Tuesday, September 12

8:30 – 9:15 AM  **Orientation and Course Objectives** - Tori Stivers
- Introduce instructors, books, agenda

Chapter 1 - Introduction to Alliance Course & HACCP

9:15 – 10:00  **Chapter 2 - Prerequisite Programs & Sanitation Control Procedures (SCPs)** - Krissa Jones
- Programs needed prior to HACCP implementation
- Relationship between GMPs, SCPs, and HACCP
- Requirements for eight key sanitation areas; SCP examples

10:00 – 10:15  Coffee/stretch break

10:15 – 10:30  Chapter 2 continued

10:30 – 11:45  **Chapter 3 – Seafood Safety Hazards** - Arlyss Jones
- Species-related and process-related hazards
- Types of pathogens: bacteria, viruses, parasites
- Harvest area hazards: natural and chemical toxins, aquaculture drugs
- Process-related hazards: food additives and allergens, physical hazards

11:45 – 1:15 PM  **Lunch** (on your own; not provided)

1:15 – 1:45  **Chapter 4 – Preliminary Steps in Developing a HACCP Plan** - Patti Ross
- Assemble a HACCP team; describe product, intended use, & consumers
- Develop accurate process flow chart & processing description
- Introduce product description form & XYZ Seafood Co. example

1:45 – 2:15  **Introduce FDA’s 2011 Hazards & Controls Guide** - Tori Stivers
- Organizational structure; format of hazards chapters
- Demonstrate how to use chapter 3 tables
- Use model examples to identify potential hazards & control measures

2:15 – 2:30  Coffee/stretch break
Chapter 5. Principle 1 – Hazard Analysis - Patti Ross
- Introduce hazard analysis worksheet & process
- Identify species- and process-related hazards using Guide Chapt 3 tables
- Determine/justify significant hazards; identify control measures
- Example of fresh Mahi-mahi fillets/XYZ Seafood Co.

Coffee break

Chapter 6. Principle 2 – Determine Critical Control Points - Tori Stivers
- Definition and examples of critical control points (CCPs)
- Use of decision tree to identify CCPs
- Example using fresh Mahi-mahi/XYZ Seafood Co.

Assignment of Students to Groups to Begin Hazard Analyses

Second Day - Wednesday, September 13

8:30 – 8:45 Instructions to Model Groups

8:45 – 10:45 Divide into Product Groups to Complete Hazard Analysis Worksheets
Facilitated by A. Jones, K. Jones, Ross, Singh, Stivers

- Define critical limit (CL); determine CLs for a CCP
- Introduce HACCP plan form, operating limits
- Explain control strategy options in Hazards Guide chapters & select CLs
- Example using fresh Mahi-mahi fillets/XYZ Seafood Co.

11:45 – 1:00 Lunch (on your own; not provided)

1:00 – 1:45 Chapter 8. Principle 4 – Critical Control Point Monitoring - Patti Ross
- Definition and purpose of CCP monitoring
- Four elements of monitoring procedures; using Guide
- Example using fresh Mahi-mahi/XYZ Seafood Co.

1:45 – 2:30 Chapter 9. Principle 5 – Corrective Actions - Tori Stivers
- Definition and components; need for predetermined corrective actions (CAs)
- Mandatory documentation; using Guide to identify CAs
- If/then examples; XYZ Seafood Co. CA examples

2:30 – 2:45 Coffee/stretch break

- Definition, purpose, and types of verification procedures
- Frequency of verification procedures; establishing a schedule
- Example using XYZ Seafood Co.

3:45 – 4:15  **Chapter 11. Principle 7 – Record-Keeping Procedures**  - Krissa Jones
- Importance and types of records required for HACCP systems
- Distinguish HACCP and SSOP records and requirements
- Examples of records; review XYZ Seafood Co. records

4:15 – 4:30  **Coffee/stretch break**

4:30 – 5:00  **Chapter 11 continued**

5:00 – 5:30  **Work on HACCP Plans in Model Groups**

**Third Day - Thursday, September 14**

8:30 – 10 AM  **Chapter 12 – The Seafood HACCP Regulation**  - Arlyss Jones
- Format, definition, requirements

10:00 – 11:30  **Group Work Session to Complete Hazard Analysis Worksheets and/or Develop HACCP Plans**  (A. Jones, K. Jones, Ross, Singh, Stivers)

11:30 – 12:45 PM  **Lunch**  (on your own; not provided)

12:45 – 2:30  **Group Work Session to Finish HACCP Plans & Prepare Presentations**

2:30 – 4:30  **Group Presentations of Hazard Analysis Results and HACCP Plans**

4:30 – 5:00  **Chapter 13 – Resources for Preparing HACCP Plans**  - Tori Stivers
- Personnel, publications, online resources, government agencies
- Chapter 2 in FDA’s Hazards & Controls Guide

5:00 – 5:30  **Final Q & A, Comments; Completion of Course Evaluation Forms**

**Course Instructors**

Arlyss Jones, Investigator, U.S. Food & Drug Administration (FDA), Savannah
Krissa Jones, Manufactured Foods Manager, Georgia Dept. of Agriculture, Atlanta
Patti Ross, Consumer Safety Officer, Div. of Seafood Safety, CFSAN, FDA, College Park, MD
Manpreet Singh, Professor & Extension Food Safety Specialist, Univ. of GA, Athens, GA
Tori Stivers, Seafood Specialist, UGA Marine Extension & GA Sea Grant, Peachtree City