Syllabus

Course Prefix and Number: CULA 100  
Number of Credits: 3
Course Title: Sanitation

Course Prerequisites: none
Course Description: Exploration of the fundamentals of microbiology and application to food and environmental sanitation. Origins of food-borne disease and the utilization of proper sanitation and safety procedures are explored. The curriculum is covered through lecture, demonstration, and food preparation. Students receive a food safety certificate.

Learning Outcomes:  
At the end of this course students will be able to:
A. Identify the critical control points during all food handling processes as a method for minimizing the risk of food borne illness (HACCP system).
B. Identify microorganisms which are related to food spoilage and food borne illnesses; describe their requirements and methods for growth.
C. Describe symptoms common to food borne illnesses and how these illnesses can be prevented.
D. Demonstrate good personal hygiene and health habits.
E. Use acceptable procedures when preparing potentially hazardous foods to include time/temperature principles.
F. List the major reasons for and recognize signs of food spoilage.
G. Outline the requirements for proper receiving and storage of both raw and prepared foods.
H. Recognize sanitary and safety design and construction features of food production equipment and facilities. (i.e., NSF, UL, OSHA ADA, etc.)
I. Describe types of cleaners and sanitizers and their proper use.
J. Review Material Safety Data Sheets (MSDS) and explain their requirements in handling hazardous materials. Discuss right-to-know laws.
K. Develop cleaning and sanitizing schedule and procedures for equipment and facilities.
L. Identify proper methods of waste disposal and recycling.
M. Describe appropriate measures for insects, rodents and pest control irradiation.
N. Conduct a sanitation self-inspection and identify modifications necessary for compliance with standards.
O. Review laws and rules of the regulatory agencies governing sanitation and safety in foodservice operation.

To achieve the learning outcomes, the student will:

1. Analyze evidence to determine the presence of food-borne illness outbreaks. (A)
2. Recognize risks associated with high-risk populations. (A)
3. Identify the characteristics of potentially hazardous food. (B)
4. Recognize a manager's responsibility to provide food safety training to employees. (B)
5. Identify the need to maintain food safety training records. (B)
6. Identify the appropriate training tools for teaching food safety. (B)
7. Ensure all food service employees are trained initially and on an ongoing basis. (B)
8. Identify factors that affect the growth of food-borne pathogens. (B)
9. Differentiate between food-borne intoxication, infections and toxin mediated infections. (C)
10. Identify major food-borne illnesses and their symptoms. (C)
11. Identify characteristics of major food-borne pathogens including source, foods involved in outbreaks, and methods of prevention. (C)
12. Identify biological, chemical and physical contaminants. (C)
13. Identify methods to prevent biological, chemical and physical contamination. (C)
14. Identify the eight most common allergens, associated symptoms and methods of prevention. (C)
15. Identify personal behaviors that can contaminate the food. (D)
16. Identify proper hand washing procedures. (D)
17. Identify when hands should be washed. (D)
18. Identify appropriate hand sanitizers and when to use them. (D)
19. Identify the proper procedure for covering cuts, wounds and sores. (D)
20. Identify procedures that must be followed when using gloves. (D)
21. Identify jewelry that poses a hazard to food safety. (D)
22. Identify requirements for employee work attire. (D)
23. Identify the regulatory exceptions for allowing bare hand contact with ready to eat and cooked food. (D)
24. Identify criteria for excluding an employee from the establishment or restricting them from working with or around food. (D)
25. Identify criteria for excluding or restricting employees from working within establishments that serve high risk populations. (D)
26. Identify illnesses that are required to be reported to the health agency. (D)
27. Identify policies that should be implemented at the establishment regarding eating, drinking and smoking while working with food. (D)
28. Identify methods for preventing cross contamination. (E)
29. Identify methods for preventing time and temperature abuse. (E)
30. Identify different types of temperature measuring devices and their uses. (E)
31. Calibrate and maintain different temperature measuring devices. (E)
32. Properly measure the temperature of food at each point in the flow of food. (E)
33. Identify an approved food source. (E)
34. Identify accept and reject criteria for meat and poultry, seafood, milk and airy products, eggs, fruit and vegetables, canned goods and other dry food, ready to eat food, froze food, bakery goods. (F)
35. Properly label and date-mark refrigerated, frozen and dry food prior to storage. (F)
36. Properly store refrigerated, frozen, dry and canned food. (F)
37. Apply first in, first out practices as they relate to refrigerated, frozen, and dry storage areas. (F)
38. Properly store raw food to prevent cross contamination. (F)
39. Identify temperature requirements for refrigerated and dry storage areas. (F)
40. Identify proper storage containers for refrigerated, frozen and dry food. (F)
41. Identify proper methods for thawing foods. (F)
42. Identify the minimum internal cooking time and temperatures for potentially hazardous foods. (F)
43. Identify the proper procedure for cooking potentially hazardous foods in a microwave. (F)
44. Identify methods and time and temperature requirements for cooling cooked food. (F)
45. Identify time and temperature requirements for reheating cooked, potentially hazardous food. (F)
46. Identify methods for preventing contamination and time and temperature abuse when preparing food. (F)
47. Recognize the importance of informing consumers of risks when serving raw or undercooked food. (F)
48. Identify time and temperature requirements for holding hot and cold potentially hazardous food. (F)
49. Identify procedures for preventing time-temperature abuse and cross contamination when displaying and serving food. (F)
50. Identify the requirements for using time rather than temperature as the only method of control when holding ready to eat food. (F)
51. Implement methods for minimizing bare-hand contact with ready to eat food. (F)
52. Identify hazards associated with the transportation of food and methods for preventing them. (G)
53. Identify hazards associated with the service of food off site and methods for preventing them. (G)
54. Identify hazards associated with vending food and methods for preventing them. (G)
55. Prevent customers from contaminating self service areas. Prevent employees from contaminating food. (G)
56. Identify how active managerial control can impact food safety. (G)
57. Identify HACCP principles for preventing food-borne illness. (H)
58. Implement HACCP principles when applicable. (H)
59. Identify when a HACCP plan is required. (H)
60. Implement a crisis management program. (H)
61. Cooperate with regulatory agencies in the event of a food-borne illness investigation. (H)
62. Identify when a plan review is required. (H)
63. Identify organizations that certify equipment that meets sanitation standards. (H)
64. Identify characteristics of an appropriate food contact and non food contact surface. (H)
65. Identify the requirements for installing stationary and mobile equipment. (H)
66. Recognize the importance of maintaining equipment. (H)
67. Identify and prevent cross connection and back flow. (H)
68. Identify requirements for hand washing facilities including appropriate locations and numbers. (H)
69. Identify the proper response to a waste-water over flow. (H)
70. Recognize the importance of properly installing and maintaining grease traps. Identify potable water sources and testing requirements. (H)
71. Identify lighting intensity requirements for different areas of the establishment. (H)
72. Identify methods for preventing lighting sources from contaminating food. (H)
73. Identify methods for preventing ventilation systems from contaminating food and food contact surfaces. (H)
74. Identify requirements for storing indoor and outdoor waste. (H)
75. Identify proper methods for cleaning waste receptacles. (H)
76. Recognize the need for frequent waste removal to prevent odor and pest problems. (L)
77. Identify characteristics of appropriate flooring for food establishments. (H)
78. Recognize the importance of complying with ADA requirements for facility design. (H)
79. Recognize the importance of keeping physical facilities in proper repair. (H)
80. Identify requirements for ware-washing facilities. (H)
81. Explain the difference between cleaning and sanitizing. (I)
82. Identify approved sanitizers. (I)
83. Identify the factors affecting the efficiency of sanitizers. (I)
84. Use the appropriate test kit for each sanitizer. (I)
85. Follow the requirements for frequency of cleaning and sanitizing food-contact surfaces. (I)
86. Properly clean and sanitize items in a three compartment sink. (I)
87. Properly clean and sanitize food contact surfaces and non food contact surfaces. (I)
88. Identify proper machine ware-washing techniques. (I)
89. Identify storage requirements for poisonous or toxic materials. (J)
90. Dispose of poisonous or toxic materials according to legal requirements. (J)
91. Follow the legal requirements for the use of poisonous or toxic material in a food establishment. (J)
92. Properly store tools, equipment and utensils that have been sanitized. (K)
93. Identify requirements of an integrated pest management program. (M)
94. Differentiate between pest prevention and pest control. (M)
95. Identify ways to prevent pests from entering the facility. (M)
96. Identify the signs of pest infestation and/or activity. (M)
97. Identify requirements for applying pesticides. (M)
98. Identify proper storage requirements for pesticides and pest application products. (M)
99. Identify the principles and procedures needed to comply with food safety regulations. (N)
100. Identify state and local regulatory agencies and regulations that require food safety compliance. (O)
101. Prepare for a regulatory inspection. (N,)
102. Identify the proper procedures for guiding a health inspector through the establishment. (N,O)

Course Grading
The grade for this course is based on assignments, daily grades, quizzes, and a written final exam

Grading Scale
90-100  A
80-89  B
70-79  C
60-69  D
<60  F

June 06