

## 2008 Mississippi Curriculum Framework

### Postsecondary Food Production and Management Technology

(Program CIP: 12.0508 – Institutional Food Workers)

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### Related Academic Standards

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## Preface

### Food Production and Management Technology Research Synopsis

Articles, books, Web sites, and other materials listed at the end of each course were considered during the revision process. The *Journal of Family and Consumer Sciences*, *Chef Educator Today*, and the Mississippi Restaurant Association, the Mississippi Department of Health, and the National Restaurant Association Educational Foundation Web sites were especially useful in providing insight into trends and issues in the field. These references are suggested for use by instructors and students during the study of the topics outlined.

Industry advisory team members from colleges throughout the state were asked to give input related to changes to be made to the curriculum framework. Specific comments related to soft skills needed in this program included being punctual, having a good attitude and work ethic, and being eager to learn. Occupational-specific skills stated included basic computer and written skills. Safety practices emphasized included using common sense and following safety procedures emphasized by industry standards.

Instructors from colleges throughout the state were also asked to give input on changes to be made to the curriculum framework. Changes suggested for the curriculum included more clinical classes for the students since hands-on training added to the textbook information will better prepare students for future jobs and responsibilities.

### Curriculum

The following national standards were referenced in each course of the curriculum:

- CTB/McGraw-Hill LLC *Tests of Adult Basic Education, Forms 7 and 8 Academic Standards*
- *21<sup>st</sup> Century Skills*
- *National Restaurant Association Educational Foundation – ServSafe<sup>®</sup> and ManageFirst*

Industry and instructor comments, along with current research, were considered by the curriculum revision team during the revision process; and changes were made as needed and appropriate. Many of the skills and topics noted in the research were already included in the curriculum framework. Specific changes made to the curriculum at the September 4, 2007, curriculum revision meeting included:

- Competencies and objectives were reviewed to ensure accuracy and appropriateness.
- Specific additions or deletions occurred for the following:
  - Culinary Arts I (FPV 1315) now has a corequisite of Food Service Sanitation (FPV 1213) and the addition of competency 6 with two objectives.
  - Culinary Arts II (FPV 1326) now has prerequisites Culinary Arts I (FPV 1315) and Food Service Sanitation (FPV 1213) or by permission of instructor.
  - Purchasing and Storage (FPV 2223) now has a corequisite of Management Procedures and Recordkeeping (FPV 1123).
  - Catering Management (FPV 2515) now has a corequisite of Culinary Arts II (FPV 1326). Competency 1 was deleted and combined into competency 2. Competencies 3, 4, 5, and 7 were deleted, and competency 6 was changed. This course now has 5 competencies. Competencies 2 and 3 are used for review of materials only.

- Menu Planning and Cost Control (FPV 2613) now has a corequisite of Management Procedures and Recordkeeping (FPV 1123) or by permission of the instructor. Objective e was added to competency 1, and the description has a minor change.
- Food Service Management (FPV 2813) now has prerequisites of Fundamentals of Operational Procedures in Food Service (FPV 1113), Management Procedures and Recordkeeping (FPV 1123), Food Service Sanitation (FPV 1213), Culinary Arts I (FPV 1315), Culinary Arts II (FPV 1326), Front of the House (FPV 1413), Purchasing and Storage (FPV 2223), Bakery Production and Management (FPV 2336), Catering Management (FPV 2515), Menu Planning and Cost Control (FPV 2613), and Nutrition (FPV 2713).
- The Recommended Tools and Equipment list was updated. An induction heating unit and six stand mixers were added to the non-capitalized items, and a DVD, a camcorder for demonstrations, and a digital camera were added to the Recommended Instructional Aids.

### Assessment

Students will be assessed using the *Food Production and Management Technology* CPAS test.

### Professional Learning

It is suggested that instructors participate in professional learning related to the following concepts:

- Review of Web sites and other materials related to cake decorating, ice carving, and pulling sugar
- How to use the program Blackboard® site
- Differentiated instruction – To learn more about differentiated instruction, please go to [http://www.paec.org/teacher2teacher/additional\\_subjects.html](http://www.paec.org/teacher2teacher/additional_subjects.html) and click on Differentiated Instruction. Work through this online course, and review the additional resources.

### Articulation

Articulation credit from Secondary Culinary and Related Foods Technology to Postsecondary Food Production and Management Technology will be awarded upon implementation of this curriculum by the college. Courses to be articulated include Food Service Sanitation (FPV 1213), with the stipulation of passing the CPAS and ServSafe® certification, and Fundamentals of Operational Procedures in Food Service (FPV 1113), with the stipulation of passing CPAS.

### Statewide Guidelines on Articulated Credit

#### *Eligibility*

- To be eligible for articulated credit, a student must:
  - complete the articulated Secondary Vocational Program; and
  - score 80 percent or higher on the Mississippi Career Planning and Assessment System (MS CPAS) in his or her secondary program of study.
- To be awarded articulated credit, a student must:
  - complete application for articulated credit at the community or junior college;
  - enroll in the community or junior college within 18 months of graduation; and

- successfully complete 12 non-developmental career/technical or academic credit hours in the corresponding articulated postsecondary career-technical program of study.

*How MS CPAS will be documented*

- The Research and Curriculum Unit of Mississippi State University will provide the SBCJC a list of all secondary CTE students scoring 80 percent or higher for the articulated programs.
- The SBCJC will forward the list of students eligible for articulated credit to the colleges.

*Transcripting of Articulated Credit*

- Students must complete 12 non-developmental career-technical or academic credit hours in the articulated postsecondary career-technical program of study before the articulated credit is transcripted.
- No grade will be given on the transcript for articulated courses; only hours granted will be transcripted (thus resulting in no change in quality points)

*Time Limit*

- MS CPAS scores will be accepted to demonstrate competencies for up to 18 months after high school graduation.

*Cost*

- No costs will be assessed on hours earned through articulated credit.

## Foreword

As the world economy continues to evolve, businesses and industries must adopt new practices and processes in order to survive. Quality and cost control, work teams and participatory management, and an infusion of technology are transforming the way people work and do business. Employees are now expected to read, write, and communicate effectively; think creatively, solve problems, and make decisions; and interact with each other and the technologies in the workplace. Vocational-technical programs must also adopt these practices in order to provide graduates who can enter and advance in the changing work world.

The curriculum framework in this document reflects these changes in the workplace and a number of other factors that impact on local vocational-technical programs. Federal and state legislation calls for articulation between high school and community college programs, integration of academic and vocational skills, and the development of sequential courses of study that provide students with the optimum educational path for achieving successful employment. National skills standards, developed by industry groups and sponsored by the U.S. Department of Education and Labor, provide vocational educators with the expectations of employers across the United States. All of these factors are reflected in the framework found in this document.

Referenced throughout the courses of the curriculum are the 21<sup>st</sup> Century Skills, which were developed by the Partnership for 21<sup>st</sup> Century Skills, a group of business and education organizations concerned about the gap between the knowledge and skills learned in school and those needed in communities and the workplace. A portion of the 21<sup>st</sup> Century Skills addresses learning skills needed in the 21<sup>st</sup> century, including information and communication skills, thinking and problem-solving skills, and interpersonal and self-directional skills. The need for these types of skills have been recognized for some time and the 21<sup>st</sup> Century Skills are adapted in part from the 1991 report from the U.S. Secretary of Labor's Commission on Achieving Necessary Skills (SCANS). Another important aspect of learning and working in the 21<sup>st</sup> century involves technology skills, and the International Society for Technology in Education, developers of the National Education Technology Standards (NETS), were strategic partners in the Partnership for 21<sup>st</sup> Century Skills.

Each postsecondary program of instruction consists of a program description and a suggested sequence of courses which focus on the development of occupational competencies. Each vocational-technical course in this sequence has been written using a common format which includes the following components:

- Course Name – A common name that will be used by all community/junior colleges in reporting students.
- Course Abbreviation – A common abbreviation that will be used by all community/junior colleges in reporting students.
- Classification – Courses may be classified as:
  - Vocational-technical core – A required vocational-technical course for all students.

- Area of concentration (AOC) core – A course required in an area of concentration of a cluster of programs.
  - Vocational-technical elective – An elective vocational-technical course.
  - Related academic course – An academic course which provides academic skills and knowledge directly related to the program area.
  - Academic core – An academic course which is required as part of the requirements for an Associate degree.
- Description – A short narrative which includes the major purpose(s) of the course and the recommended number of hours of lecture and laboratory activities to be conducted each week during a regular semester.
  - Prerequisites – A listing of any courses that must be taken prior to or on enrollment in the course.
  - Corequisites – A listing of courses that may be taken while enrolled in the course.
  - Competencies and Suggested Objectives – A listing of the competencies (major concepts and performances) and of the suggested student objectives that will enable students to demonstrate mastery of these competencies.

The following guidelines were used in developing the program(s) in this document and should be considered in compiling and revising course syllabi and daily lesson plans at the local level:

- The content of the courses in this document reflects approximately 75 percent of the time allocated to each course. The remaining 25 percent of each course should be developed at the local district level and may reflect:
  - Additional competencies and objectives within the course related to topics not found in the State framework, including activities related to specific needs of industries in the community college district.
  - Activities which develop a higher level of mastery on the existing competencies and suggested objectives.
  - Activities and instruction related to new technologies and concepts that were not prevalent at the time the current framework was developed/revised.
  - Activities which implement components of the Mississippi Tech Prep initiative, including integration of academic and vocational-technical skills and coursework, school-to-work transition activities, and articulation of secondary and postsecondary vocational-technical programs.
  - Individualized learning activities, including worksite learning activities, to better prepare individuals in the courses for their chosen occupational area.
- Sequencing of the course within a program is left to the discretion of the local district. Naturally, foundation courses related to topics such as safety, tool and equipment usage, and other fundamental skills should be taught first. Other courses related to specific skill areas and related academics, however, may be sequenced to take advantage of seasonal and climatic conditions, resources located outside of the school, and other factors.

- Programs that offer an Associate of Applied Science degree must include a minimum 15 semester credit hour academic core. Specific courses to be taken within this core are to be determined by the local district. Minimum academic core courses are as follows:
  - 3 semester credit hours                      Math/Science Elective
  - 3 semester credit hours                      Written Communications Elective
  - 3 semester credit hours                      Oral Communications Elective
  - 3 semester credit hours                      Humanities/Fine Arts Elective
  - 3 semester credit hours                      Social/Behavioral Science Elective

It is recommended that courses in the academic core be spaced out over the entire length of the program, so that students complete some academic and vocational-technical courses each semester. Each community/junior college has the discretion to select the actual courses that are required to meet this academic core requirement.

- Technical elective courses have been included to allow community colleges and students to customize programs to meet the needs of industries and employers in their area.

In order to provide flexibility within the districts, individual courses within a framework may be customized by:

- Adding new competencies and suggested objectives.
- Revising or extending the suggested objectives for individual competencies.
- Adjusting the semester credit hours of a course to be up 1 hour or down 1 hour (after informing the State Board for Community and Junior Colleges [SBCJC] of the change).

In addition, the curriculum framework as a whole may be customized by:

- Resequencing courses within the suggested course sequence.
- Developing and adding a new course which meets specific needs of industries and other clients in the community or junior college district (with SBCJC approval).
- Utilizing the technical elective options in many of the curricula to customize programs.



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## Program Description

The Food Production and Management Technology curriculum provides a Vocational Certificate and an Associate of Applied Science degree. Students may receive a certificate after completing 34 semester hours of vocational-technical courses. The program for an Associate of Applied Science degree is available for students completing 70 semester hours, which include 15 semester hours of academic credit. The program offers study in areas of food production, management, and service for restaurant operations, quantity food operations, and catering businesses. Emphasis is placed on technical skills in preparing students for entry-level job opportunities in production and management in both commercial and institutional food service settings.

Industry standards referenced are from the National Restaurant Association Educational Foundations ServSafe<sup>®</sup> and ManageFirst programs.

## Suggested Course Sequence\*

### Food Production and Management Technology

#### Associate of Applied Science Degree

##### FIRST YEAR

3 sch Fundamentals of Operational Procedures in Food Service (FPV 1113) 3 sch Food Service Sanitation (FPV 1213) 5 sch Culinary Arts I (FPV 1315) 3 sch Front of the House (FPV 1413) 3 sch Oral Communications Elective <hr style="width: 10%; margin-left: 0;"/> 17 sch	3 sch Management Procedures and Recordkeeping (FPV 1123) 6 sch Culinary Arts II (FPV 1326) 3 sch Supervised Work Experience in Food Production and Management I [FPV 291(1-3)] or Work-Based Learning I, II, III, IV, V, VI [WBL 191(1-3), WBL 192(1-3), WBL 193(1-3), WBL 291(1-3), WBL 292(1-3), WBL 293(1-3)] 3 sch Elective*** 3 sch Written Communications Elective <hr style="width: 10%; margin-left: 0;"/> 18 sch
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##### SECOND YEAR

3 sch Purchasing and Storage (FPV 2223) 5 sch Catering Management (FPV 2515) 3 sch Menu Planning and Cost Control (FPV 2613) 3 sch Nutrition (FPV 2713) 3 sch Math/Science Elective <hr style="width: 10%; margin-left: 0;"/> 17 sch	6 sch Bakery Production and Management (2336) 3 sch Food Service Management (FPV 2813) 3 sch Supervised Work Experience in Food Production and Management II [FPV 292(1-3)] or Work-Based Learning I, II, III, IV, V, VI [WBL 191(1-3), WBL 192(1-3), WBL 193(1-3), WBL 291(1-3), WBL 292(1-3), WBL 293(1-3)] 3 sch Humanities/Fine Arts Elective 3 sch Social/Behavioral Science Elective <hr style="width: 10%; margin-left: 0;"/> 18 sch
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\* Students who lack entry level skills in math, English, science, etc. will be provided related studies.

APPROVED ELECTIVES\*\*\*

Fundamentals of Microcomputer Applications (CPT 1113)

Science and Technology (ATE 1113)

Any business or related vocational or academic elective by permission of instructor

**Suggested Course Sequence\***  
**Food Production and Management Technology**

**Certificate Option**

FIRST YEAR

3 sch Fundamentals of Operational Procedures in Food Service (FPV 1113) 3 sch Food Service Sanitation (FPV 1213) 5 sch Culinary Arts I (FPV 1315) 3 sch Front of the House (FPV 1413) 3 sch Menu Planning and Cost Control (FPV 2613)	3 sch Management Procedures and Recordkeeping (FPV 1123) 6 sch Culinary Arts II (FPV 1326) 3 sch Nutrition (FPV 2713) 3 sch Purchasing and Storage (FPV 2223) 3-6 sch Elective**
17 sch	18-21 sch

\* Students who lack entry level skills in math, English, science, etc. will be provided related studies.

APPROVED ELECTIVES\*\*

Food Service Management (FPV 2813)  
 Bakery Production and Management (FPV 2336)  
 Catering Management (FPV 2515)  
 Supervised Work Experience in Food Production and Management Technology I [FPV 291(1-3)]  
 Supervised Work Experience in Food Production and Management Technology II [FPV 292(1-3)]  
 Science and Technology (ATE 1113)  
 Work-Based Learning I, II, III, IV, V, VI [WBL 191(1-3), WBL 192(1-3), WBL 193(1-3), WBL 291(1-3), WBL 292(1-3), WBL 293(1-3)]

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## Food Production and Management Technology Courses

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**Course Name:** Fundamentals of Operational Procedures in Food Service

**Course Abbreviation:** FPV 1113

**Classification:** Vocational-Technical Core

**Description:** Operational procedures for food service personnel with emphasis on using math skills for standard weights and measures, portion control, converting recipes, production formulas, and utilizing manual and computerized applications. (3 sch: 2 hr. lecture, 2 hr. lab)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>
1. Demonstrate skills using manual and ten-key touch pad mathematical operations. <ol style="list-style-type: none"> <li>a. Examine the basic parts and functions of the ten-key touch pad.</li> <li>b. Review basic mathematical operations using manual and ten-key touch pad applications.</li> </ol>
2. Perform mathematical operations related to food preparation. <ol style="list-style-type: none"> <li>a. Perform calculations and conversions related to customary weights and measures.</li> <li>b. Employ basic mathematical operations to calculate portion control and cost per serving.</li> </ol>
3. Employ basic mathematical operations to convert standard recipes and compute recipe yield. <ol style="list-style-type: none"> <li>a. Determine conversion factor to compute specified recipe yield.</li> <li>b. Calculate recipe yield in number of servings.</li> </ol>

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## STANDARDS

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### *ServSafe<sup>®</sup> Course Content*

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SS1 Providing Safe Food  
 SS4 The Safe Foodhandler  
 SS12 Food Safety Regulation and Standards

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### *Related Academic Standards*

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R1 Interpret Graphic Information (forms, maps, reference sources)  
 R3 Recall Information (details, sequence)  
 R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)  
 R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)  
 M1 Addition of Whole Numbers (no regrouping, regrouping)  
 M2 Subtraction of Whole Numbers (no regrouping, regrouping)  
 M3 Multiplication of Whole Numbers (no regrouping, regrouping)

- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)

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### 21<sup>st</sup> Century Skills

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

### SUGGESTED REFERENCES

Blocker, L., & Hill, J. (2007). *Culinary math* (3<sup>rd</sup> ed.). Hoboken, NJ: Wiley.

Gisslen, W. (2007). *Professional cooking* (6<sup>th</sup> ed.). Hoboken, NJ: Wiley.

National Restaurant Association Educational Foundation. (n.d.). Retrieved September 17, 2007, from <http://www.nraef.org/>

Strianese, A. J., & Strianese, P. P. (2007). *Math principles for food service occupations* (5<sup>th</sup> ed.). Albany, NY: Delmar.

**Course Name:** Management Procedures and Recordkeeping

**Course Abbreviation:** FPV 1123

**Classification:** Vocational-Technical Core

**Description:** A continuation of Fundamentals of Operational Procedures in Food Service. Essentials in food service recordkeeping and managerial math. (3 sch: 2 hr. lecture, 2 hr. lab)

**Prerequisite:** Fundamentals of Operational Procedures in Food Service (FPV 1113) or by permission of instructor

<b>Competencies and Suggested Objectives</b>	
1.	Apply basic mathematical principles to prepare food service recordkeeping reports. <ol style="list-style-type: none"> <li>a. Generate daily production reports for various production areas.</li> <li>b. Formulate reports related to purchasing and receiving.</li> </ol>
2.	Apply basic mathematical principles to managerial procedures. <ol style="list-style-type: none"> <li>a. Calculate cost and price for menu items.</li> <li>b. Generate daily reports for inventory, taxes, payroll, deposits, interest, and financial statements.</li> </ol>

## STANDARDS

### *ServSafe<sup>®</sup> Course Content*

- SS1 Providing Safe Food
- SS4 The Safe Foodhandler
- SS12 Food Safety Regulation and Standards

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)



- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)

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### 21<sup>st</sup> Century Skills

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

### SUGGESTED REFERENCES

Blocker, L., & Hill, J. (2007). *Culinary math* (3<sup>rd</sup> ed.). Hoboken, NJ: Wiley.

Gisslen, W. (2007). *Professional cooking* (6<sup>th</sup> ed.). Hoboken, NJ: Wiley.

National Restaurant Association Educational Foundation. (n.d.). Retrieved September 17, 2007, from <http://www.nraef.org/>

Strianese, A. J., & Strianese, P. P. (2007). *Math principles for food service occupations* (5<sup>th</sup> ed.). Albany, NY: Delmar.

**Course Name:** Food Service Sanitation

**Course Abbreviation:** FPV 1213

**Classification:** Vocational-Technical Core

**Description:** Instruction in the area of sanitation to aid in the prevention of food poisoning and foodborne diseases including the Hazard Analysis Critical Control Point (HACCP) system. (3 sch: 2 hr. lecture, 2 hr. lab)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>	
1.	Practice proper hygiene, food handling, food storage, and prevention of foodborne illnesses as identified in ServSafe <sup>®</sup> . <ol style="list-style-type: none"> <li>Practice personal hygiene that meets foodservice standards.</li> <li>Demonstrate the principles of hazard analysis critical control points (HACCP).</li> <li>Identify foodborne illnesses, the way they are spread, foods involved, and methods of prevention.</li> <li>Utilize proper cleaning and sanitizing techniques.</li> </ol>
2.	Practice proper non-food storage, cleaning and sanitizing techniques, and pest control as identified in ServSafe <sup>®</sup> . <ol style="list-style-type: none"> <li>Explain proper storage techniques for chemicals and hazardous products used in foodservice.</li> <li>Demonstrate methods of manually and mechanically cleaning and sanitizing.</li> <li>Explain proper pest control techniques.</li> </ol>

## STANDARDS

### *ServSafe<sup>®</sup> Course Content*

- SS1 Providing Safe Food
- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS6 The Flow of Food: Purchasing and Receiving
- SS7 The Flow of Food: Storage
- SS8 The Flow of Food: Preparation
- SS9 The Flow of Food: Service
- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

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*Related Academic Standards*

---

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A5 Measurement (money, time, temperature, length, area, volume)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

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**SUGGESTED REFERENCES**

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*Mississippi Department of Health.* (2007). Retrieved September 6, 2007, from <http://www.msdh.state.ms.us/>

National Restaurant Association Educational Foundation. (2006). *ServSafe*® (4<sup>th</sup> ed.). Hoboken, NJ: Wiley.

National Restaurant Association Educational Foundation (Producer). (n.d.). *ServSafe*® *complete food safety DVD set* [DVD]. (Available from National Restaurant Association Educational Foundation, 175 West Jackson Boulevard, Suite 1500, Chicago, IL 60604-2814)

*National Restaurant Association Educational Foundation.* (n.d.). Retrieved September 17, 2007, from <http://www.nraef.org/>

**Course Name:** Culinary Arts I

**Course Abbreviation:** FPV 1315

**Classification:** Vocational-Technical Core

**Description:** Study of principles, techniques, and practices of food preparation and their effects on food products with emphasis on the performance of culinary techniques, use of equipment, and quality controls in preparing and serving meals. (5 sch: 2 hr. lecture, 6 hr. lab)

**Corequisite:** Foodservice Sanitation (FPV 1213)

<b>Competencies and Suggested Objectives</b>	
1. Identify the development of trends from classical to modern kitchens.	<ul style="list-style-type: none"> <li>a. Discuss the origins of classical cuisine, nouvelle cuisine, and other influences.</li> <li>b. Describe the organization of kitchens from classical to modern.</li> </ul>
2. Integrate the safe and efficient use of equipment with culinary practices.	<ul style="list-style-type: none"> <li>a. Identify food service equipment.</li> <li>b. Discuss safety factors when operating food service equipment.</li> </ul>
3. Implement basic cooking principles.	<ul style="list-style-type: none"> <li>a. Explain the effects of heat on foods, heat transfer, and cooking times.</li> <li>b. Discuss various cooking methods such as moist heat methods, dry heat methods, dry heat methods using fat, and microwave cooking.</li> <li>c. Demonstrate the art of seasoning and flavoring.</li> </ul>
4. Demonstrate pre-preparation techniques.	<ul style="list-style-type: none"> <li>a. Practice mise en place.</li> <li>b. Explain the techniques for preparing raw foods.</li> <li>c. Utilize the techniques for blanching, parcooking, and marinating.</li> <li>d. Demonstrate techniques for frying such as breading, dredging, or flouring.</li> </ul>
5. Implement standard cooking practices in culinary preparation techniques.	<ul style="list-style-type: none"> <li>a. Integrate the standard cooking practices in stocks, sauces, and soups.</li> <li>b. Integrate the standard cooking practices in meat, poultry, fish, and shellfish.</li> </ul>
6. Introduce presentation and garnishing techniques.	<ul style="list-style-type: none"> <li>a. Introduce proper hot and cold plate presentations.</li> <li>b. Introduce various garnishing techniques.</li> </ul>

## STANDARDS

### *ServSafe*® Course Content

- SS1 Providing Safe Food
- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS6 The Flow of Food: Purchasing and Receiving

- SS7 The Flow of Food: Storage
- SS8 The Flow of Food: Preparation
- SS9 The Flow of Food: Service
- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

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*Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy

- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

## SUGGESTED REFERENCES

- The Culinary Institute of America. (2006). *Professional chef* (8<sup>th</sup> ed.). Hoboken, NJ: Wiley.
- Gisslen, W. (2007). *Professional cooking* (6<sup>th</sup> ed.). Hoboken, NJ: Wiley.
- Herbst, S. T. (2007). *The new food lover's companion* (4<sup>th</sup> ed.). Hauppauge, NY: Barron's Educational Series.
- Labensky, S. R., & Hause, A. M. (2007). *On cooking* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Labensky, S. R., Ingram, G. G., & Labensky, S. R. (2007). *The Prentice Hall essentials dictionary of culinary arts*. Upper Saddle River, NJ: Prentice Hall.
- Molt, M. (2006). *Food for fifty* (12<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

**Course Name:** Culinary Arts II

**Course Abbreviation:** FPV 1326

**Classification:** Vocational-Technical Core

**Description:** A continuation of the study of principles, techniques, and practices of food preparation and their effects on food products with emphasis on the performance of culinary techniques, use of equipment, and quality controls in preparing and serving meals. (6 sch: 2 hr. lecture, 8 hr. lab)

**Prerequisite:** Culinary Arts I (FPV 1315), Food Service Sanitation (FPV 1213), or by permission of instructor

Competencies and Suggested Objectives
<ol style="list-style-type: none"> <li>1. Implement standard cooking practices in culinary preparation techniques.               <ol style="list-style-type: none"> <li>a. Integrate the standard cooking practices in vegetables, potatoes, pastas, and grains.</li> <li>b. Integrate the standard cooking practices in salads, salad dressing, sandwiches, hors d'oeuvres, breakfast items, breads, and desserts.</li> <li>c. Integrate the specialized cooking practices of ethnic and international cuisines.</li> </ol> </li> <li>2. Determine and implement appropriate food presentation and garnish.               <ol style="list-style-type: none"> <li>a. Create a hot food presentation using appearance, plating, and garnish.</li> <li>b. Prepare a cold platter presentation.</li> <li>c. Prepare a buffet using both hot and cold presentations.</li> </ol> </li> </ol>






## STANDARDS

### *ServSafe® Course Content*

- SS1 Providing Safe Food
- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS6 The Flow of Food: Purchasing and Receiving
- SS7 The Flow of Food: Storage
- SS8 The Flow of Food: Preparation
- SS9 The Flow of Food: Service
- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

### *Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)

- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### 21<sup>st</sup> Century Skills

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

### SUGGESTED REFERENCES

- The Culinary Institute of America. (2006). *Professional chef* (8<sup>th</sup> ed.). Hoboken, NJ: Wiley.
- Gisslen, W. (2007). *Professional cooking* (6<sup>th</sup> ed.). Hoboken, NJ: Wiley.



Herbst, S. T. (2007). *The new food lover's companion* (4<sup>th</sup> ed.) Hauppauge, NY: Barron's Educational Series.

Labensky, S. R., & Hause, A. M. (2007). *On cooking* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Labensky, S. R., Ingram, G. G., & Labensky, S. R. (2007). *The Prentice Hall essentials dictionary of culinary arts*. Upper Saddle River, NJ: Prentice Hall.

Molt, M. (2006). *Food for fifty* (12<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

**Course Name:** Front of the House

**Course Abbreviation:** FPV 1413

**Classification:** Vocational-Technical Core

**Description:** Management of the front of the house in order to fulfill the needs of the guest and the establishment. Emphasis is placed on the types and styles of dining service merchandising, customer service, and employee training techniques. (3 sch: 2 hr. lecture, 2 hr. lab)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>
1. Execute the various types of preparation and setup for dining room guest service. <ol style="list-style-type: none"> <li>a. Develop dining room decor and attire for various themes.</li> <li>b. Design a promotional food display, i.e., plate presentation, dessert cart, display case, or buffet table.</li> </ol>
2. Demonstrate the proper procedures used to serve a dining room guest. <ol style="list-style-type: none"> <li>a. Perform proper setup and service procedures.</li> <li>b. Demonstrate international styles of dining services.</li> </ol>
3. Create merchandising techniques appropriate for various food service operations. <ol style="list-style-type: none"> <li>a. Perform proper setup and service procedures.</li> <li>b. Demonstrate international styles of dining services.</li> </ol>
4. Employ techniques necessary to fulfill the anticipated needs of the guests. <ol style="list-style-type: none"> <li>a. Define customer service.</li> <li>b. Discuss the importance of customer service and how it directly affects an establishment's success.</li> <li>c. Critique customer service in a food service establishment.</li> <li>d. Identify appropriate methods in resolving customer complaints.</li> </ol>
5. Practice interpersonal skills required for success in the food service industry. <ol style="list-style-type: none"> <li>a. Demonstrate a positive attitude.</li> <li>b. Practice teamwork.</li> <li>c. Utilize effective verbal and non-verbal communication skills.</li> <li>d. Discuss conflict resolution skills to real-life situations.</li> <li>e. Discuss appropriate work ethics.</li> </ol>
6. Conduct an inservice training session for at least one of the above front of the house competencies. <ol style="list-style-type: none"> <li>a. Discuss legal responsibilities involved in training staff.</li> <li>b. Identify appropriate training techniques.</li> <li>c. Present an inservice training session.</li> <li>d. Complete proper documentation of the training provided.</li> </ol>

**STANDARDS***ServSafe® Course Content*

- SS1 Providing Safe Food
- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS8 The Flow of Food: Preparation
- SS9 The Flow of Food: Service
- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

*Related Academic Standards*

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)

S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
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- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

**SUGGESTED REFERENCES**

The Culinary Institute of America. (2001). *Remarkable service* (1<sup>st</sup> ed.). Hoboken, NJ: Wiley.

Fischer, J. W. (2005). *At your service*. Hoboken, NJ: Wiley.

King, C. A. (1988). *Professional dining room management* (2<sup>nd</sup> ed.). Hoboken, NJ: Wiley.

Kotschevar, L. H., & Luciani, V. (2007). *Presenting service* (2<sup>nd</sup> ed.). Hoboken, NJ: Wiley.

National Restaurant Association Educational Foundation. (2007). *ManageFirst customer service*. Upper Saddle River, NJ: Pearson Prentice Hall.

Sanders, E., Paz, P., & Wilkinson, R. (2002). *Service at its best*. Upper Saddle River, NJ: Pearson Prentice Hall.

**Course Name:** Purchasing and Storage

**Course Abbreviation:** FPV 2223

**Classification:** Vocational-Technical Core

**Description:** An introduction to selection and procurement of food and non-food materials in hospitality and related industries. (3 sch: 2 hr. lecture, 2 hr. lab)

**Prerequisite:** Food Service Sanitation (FPV 1213), Fundamentals of Operational Procedures in Food Service (FPV 1113), or by permission of instructor

**Corequisite:** Management Procedures and Recordkeeping (FPV 1123)

<b>Competencies and Suggested Objectives</b>	
1.	Explore techniques and procedures necessary for selection and procurement in the food service industry. <ol style="list-style-type: none"> <li>Explain the advantages of having purchase specifications and what information should be included on the purchase specifications.</li> <li>Identify the roles of purchase requisitions and purchase orders.</li> <li>Demonstrate the essentials of proper receiving and invoice receiving techniques.</li> </ol>
2.	Explore techniques and procedures necessary for the selection and procurement of food and non-food items. <ol style="list-style-type: none"> <li>Discuss guidelines for the purchase of fresh produce, vegetables, fruits, dairy products, poultry, fish, and meats.</li> <li>Discuss guidelines for the procurement of non-food items such as cleaning supplies, tools, maintenance, and paper products.</li> <li>Research information on procurement programs or purchase forms.</li> </ol>
3.	Explain storage objectives and management techniques. <ol style="list-style-type: none"> <li>Discuss storage objectives as related to HACCP.</li> <li>Demonstrate procedures for maintaining inventory control with a manual or computerized system.</li> </ol>

## STANDARDS

### *ServSafe® Course Content*

- SS1 Providing Safe Food
- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS6 The Flow of Food: Purchasing and Receiving
- SS7 The Flow of Food: Storage
- SS8 The Flow of Food: Preparation
- SS9 The Flow of Food: Service

- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

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*Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

**SUGGESTED REFERENCES**

Feinstein, A. H., & Stefanelli, J. M. (2002). *Purchasing: Selection and procurement for the hospitality industry* (5<sup>th</sup> ed.). Hoboken, NJ: Wiley.

Molt, M. (2006). *Food for fifty* (12<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

National Restaurant Association Educational Foundation. (n.d.). Retrieved September 17, 2007, from <http://www.nraef.org/>

National Restaurant Association Educational Foundation. (2007). *ManageFirst inventory and purchasing*. Upper Saddle River, NJ: Pearson Prentice Hall.

**Course Name:** Bakery Production and Management

**Course Abbreviation:** FPV 2336

**Classification:** Vocational-Technical Core (Associate Degree); Vocational-Technical Elective (Vocational Certificate)

**Description:** Skills needed for baking and bakery merchandising. Emphasis is placed on preparation, advertising, marketing, garnishing, costing, and plating baked products. (6 sch: 2 hr. lecture, 8 hr. lab)

**Prerequisite:** Food Service Sanitation (FPV 1213), Culinary Arts I (FPV 1315), Culinary Arts II (FPV 1326), or by permission of instructor

<b>Competencies and Suggested Objectives</b>	
1.	Discuss formulas, techniques, and procedures related to baking. <ol style="list-style-type: none"> <li>Recall proper identification, use, care, safety, and cleaning of baking equipment.</li> <li>Demonstrate importance of weighing ingredients.</li> <li>Use formulas based on baker's percentages.</li> <li>Discuss the seven steps of the baking process.</li> </ol>
2.	Discuss types, use, and function of different bakery ingredients. <ol style="list-style-type: none"> <li>Prepare products using three types of yeast, and demonstrate the basic yeast dough methods.</li> <li>Demonstrate scaling, mixing, fermenting, rounding, benching, makeup and panning, baking, cooling, and storing ingredients.</li> <li>Determine shelf life and preservation of baked products.</li> </ol>
3.	Demonstrate techniques and procedures for making quick breads, doughnuts, fritters, pancakes, and waffles. <ol style="list-style-type: none"> <li>Discuss the formulas, mixing, makeup, and deep-frying for cake-type doughnuts, French doughs, fritters, pancakes, and waffles.</li> <li>Discuss the role of toppings, fillings, and icing in the bake shop.</li> </ol>
4.	Prepare quality desserts to include cakes, cookies, pies, pastries, and custards. <ol style="list-style-type: none"> <li>Prepare cakes using multiple types of frosting.</li> <li>Prepare a variety of types of cookies to include roll, drop, bar, macaroons, cake-type, and meringue.</li> <li>Prepare various types of pies, pastries, and custards.</li> </ol>
5.	Formulate plans to produce, advertise, and market bakery products. <ol style="list-style-type: none"> <li>Apply principles of displaying, merchandising, and selling baked goods.</li> <li>Apply continuous process and batch process of bakery production.</li> <li>Perform recordkeeping responsibilities associated with the operation of a bake shop.</li> </ol>

## STANDARDS

*ServSafe® Course Content*

SS1 Providing Safe Food



- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS6 The Flow of Food: Purchasing and Receiving
- SS7 The Flow of Food: Storage
- SS8 The Flow of Food: Preparation
- SS9 The Flow of Food: Service
- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

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*Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

**SUGGESTED REFERENCES**

Gisslen, W. (2005). *Professional baking* (4<sup>th</sup> ed.). Hoboken, NJ: Wiley.

Labensky, S. R., & Hause, A. M. (2007). *On cooking* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Labensky, S. R., Martel, P., & Damme, E. V. (2004). *On baking: A textbook of baking and pastry fundamentals*. Upper Saddle River, NJ: Prentice Hall.

National Restaurant Association Educational Foundation. (n.d.). Retrieved September 17, 2007, from <http://www.nraef.org/>

**Course Name:** Catering Management

**Course Abbreviation:** FPV 2515

**Classification:** Vocational-Technical Core (Associate Degree); Vocational-Technical Elective (Vocational Certificate)

**Description:** An overview of the background of catering and banquet management. Offers options in catering styles, pricing, menu design, operational controls, computerized management programs, and marketing. (5 sch: 2 hr. lecture, 6 hr. lab)

**Prerequisite:** Food Service Sanitation (FPV 1213), Culinary Arts I (FPV 1315), Front of the House (FPV 1413), Fundamentals of Operational Procedures in Food Service (FPV 1113), and Management Procedures and Recordkeeping (FPV 1123), or by permission of instructor

**Prerequisite or corequisite:** Culinary Arts II (FPV 1326)

<b>Competencies and Suggested Objectives</b>
1. Determine differences in catering styles in food service operations as well as their challenges and opportunities throughout history. <ol style="list-style-type: none"> <li>Trace the historical development of banqueting, and determine how it has affected current banquet styles.</li> <li>Compare the use of catering services in full-service restaurants, hotel food and beverage operations, catering halls, independent caterers, country clubs, contract feeding, and delicatessens.</li> <li>Explain the problems and opportunities presented by off-premise catering and take-out services.</li> </ol>
2. Review catering menu styles and design.
3. Review the use of computer applications to enhance the success of the catering food service business to include searching the Internet to find menus and recipes for catering functions.
4. Determine current innovative trends in catering. <ol style="list-style-type: none"> <li>Discuss how entertainment and regional cuisines add excitement to celebrations and business conventions.</li> <li>Explain how themes and concepts unify an event and please clients.</li> </ol>
5. Execute a catered function. <ol style="list-style-type: none"> <li>Design plans for a catered function utilizing information previously presented in class instruction.</li> <li>Cater an event to meet standards set by the instructor.</li> <li>Evaluate the catered event.</li> </ol>

## STANDARDS

*ServSafe® Course Content*

SS1 Providing Safe Food

- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS6 The Flow of Food: Purchasing and Receiving
- SS7 The Flow of Food: Storage
- SS8 The Flow of Food: Preparation
- SS9 The Flow of Food: Service
- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

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*Related Academic Standards*

---

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

**SUGGESTED REFERENCES**

- Arduser, L., & Brown, D. R. (2005). *The professional caterer's handbook: How to open and operate a financially successful catering business*. Ocala, FL: Atlantic Publishing Company.
- Scanlon, N. L. (2007). *Catering management* (3<sup>rd</sup> ed.). Hoboken, NJ: Wiley.
- Splaver, B. (1991). *Successful catering*. Hoboken, NJ: Wiley.
- Weiss, E., & Weiss, H. (1990). *Catering handbook*. Hoboken, NJ: Wiley.

**Course Name:** Menu Planning and Cost Control

**Course Abbreviation:** FPV 2613

**Classification:** Vocational-Technical Core

**Description:** A study of the principles of menu management and cost control with emphasis on foodservice operation and marketing design, nutritional adequacy, trends, cost analysis, and profit as they relate to menu design. (3 sch: 2 hr. lecture, 2 hr. lab)

**Corequisite:** Management Procedures and Recordkeeping (FPV 1123) or by permission of the instructor

Competencies and Suggested Objectives	
<ol style="list-style-type: none"> <li>1. Develop menu designs for various types of food service operations.               <ol style="list-style-type: none"> <li>a. Discuss menus designed to meet the special needs of children, teens, and senior citizens.</li> <li>b. Search the Internet to find new trends in the food service industry.</li> <li>c. Evaluate food preferences to meet trends.</li> <li>d. Discuss strategies of using menu functions as a sales tool and a production sheet.</li> <li>e. Explain how menu planning affects the physical factors of facility, labor, guest expectations, and food variety.</li> </ol> </li> <tr> <td> <ol style="list-style-type: none"> <li>2. Explain the division of income and costs and how to determine profitability.               <ol style="list-style-type: none"> <li>a. Discuss the functions of a profit and loss statement.</li> <li>b. Use menu factor analysis, the Hurst method, the breakeven method, and other methods to perform menu analysis.</li> </ol> </li> </ol> </td> </tr> </ol>	<ol style="list-style-type: none"> <li>2. Explain the division of income and costs and how to determine profitability.               <ol style="list-style-type: none"> <li>a. Discuss the functions of a profit and loss statement.</li> <li>b. Use menu factor analysis, the Hurst method, the breakeven method, and other methods to perform menu analysis.</li> </ol> </li> </ol>
<ol style="list-style-type: none"> <li>2. Explain the division of income and costs and how to determine profitability.               <ol style="list-style-type: none"> <li>a. Discuss the functions of a profit and loss statement.</li> <li>b. Use menu factor analysis, the Hurst method, the breakeven method, and other methods to perform menu analysis.</li> </ol> </li> </ol>	






## STANDARDS

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### *ServSafe<sup>®</sup> Course Content*

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- SS1 Providing Safe Food  
 SS12 Food Safety Regulation and Standards

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### *Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)  
 R2 Words in Context (same and opposite meaning)  
 R3 Recall Information (details, sequence)  
 R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)  
 R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)  
 M1 Addition of Whole Numbers (no regrouping, regrouping)  
 M2 Subtraction of Whole Numbers (no regrouping, regrouping)  
 M3 Multiplication of Whole Numbers (no regrouping, regrouping)  
 M4 Division of Whole Numbers (no remainder, remainder)

- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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### *21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

### **SUGGESTED REFERENCES**

- Drysdale, J. A., & Aldrich, J. A. (2002). *Profitable menu planning* (3<sup>rd</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- McVery, P. J., Ware, B. J., & Levesque, C. (2001). *Fundamentals of menu planning* (2<sup>nd</sup> ed.). Hoboken, NJ: Wiley.
- National Restaurant Association Educational Foundation. (2007). *ManageFirst menu marketing and management*. Upper Saddle River, NJ: Pearson Prentice Hall.
- Pavesic, D. V., & Magnant, P. F. (2005). *Fundamental principles of restaurant cost control* (2<sup>nd</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

**Course Name:** Nutrition

**Course Abbreviation:** FPV 2713

**Classification:** Vocational-Technical Core

**Description:** A study of nutrients as related to personal health, foods and food preparation, recipe or menu modification for special customer needs, and merchandising techniques associated with nutritious meals. (3 sch: 1 hr. lecture, 4 hr. lab)

**Prerequisite:** None

<b>Competencies and Suggested Objectives</b>	
1.	Explain the six food nutrients and their main functions, food sources, and recommended daily allowances. <ol style="list-style-type: none"> <li>Discuss the primary food sources of the nutrients, and discuss diseases related to overconsumption and underconsumption of each.</li> <li>Explain the value of providing a diet containing a balance of nutrients to customers.</li> </ol>
2.	Demonstrate methods to retain the maximum nutrient value of foods during preparation and serving. <ol style="list-style-type: none"> <li>Outline guidelines to be used in a food service operation to retain nutrient value of menu items.</li> <li>Prepare a demonstration utilizing at least one method to retain nutrient content during preparation or serving.</li> <li>Evaluate menus based on the Recommended Dietary Allowances (RDA) and the Food Guide Pyramid.</li> <li>Compute a nutritional analysis of personal food intake.</li> </ol>
3.	Discuss situations that necessitate special needs diets or modified diets. <ol style="list-style-type: none"> <li>Recognize special dietary needs for lifespan nutrition to include pregnancy, lactation, newborns, infants, children, adolescents, adulthood, and older adulthood.</li> <li>Refer individuals in need of nutritional plans for weight loss and maintenance programs to appropriate health-care professionals.</li> <li>Make appropriate modifications in recipes and food production techniques to comply with the Dietary Guidelines for Americans and/or prescribed modified diets.</li> </ol>
4.	Explain merchandising tactics for promoting a customer nutrition program incorporated into a food service operation. <ol style="list-style-type: none"> <li>Conduct a customer survey dealing with interest in healthy and nutritious foods.</li> <li>Describe methods to incorporate a nutrition program into various food service operations.</li> <li>Design publicity ideas for the promotion of healthy menus.</li> </ol>

## STANDARDS

*ServSafe® Course Content*

SS1 Providing Safe Food



- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS6 The Flow of Food: Purchasing and Receiving
- SS7 The Flow of Food: Storage
- SS8 The Flow of Food: Preparation
- SS9 The Flow of Food: Service
- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

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*Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

**SUGGESTED REFERENCES**

The American Culinary Federation. (2005). *Culinary fundamentals*. Upper Saddle River, NJ: Pearson Prentice Hall.

Berkoff, N. (2005). *Nutrition for the culinary arts* (1<sup>st</sup> ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

National Restaurant Association Educational Foundation. (2007). *ManageFirst nutrition*. Upper Saddle River, NJ: Pearson Prentice Hall.

Sizer, F., & Whitney, E. (2006). *Nutrition: Concepts and controversy* (10<sup>th</sup> ed.). Belmont, CA: Brooks/Cole.

**Course Name:** Food Service Management

**Course Abbreviation:** FPV 2813

**Classification:** Vocational-Technical Core (Associate Degree); Vocational-Technical Elective (Vocational Certificate)

**Description:** Management duties such as recruiting, interviewing, hiring, scheduling, job evaluations, employee orientation and training, payrolls, and rating employee performance. This course will explore the process by which the manager can enable his or her employees to function efficiently and effectively. These processes will include incentive and benefit programs, discipline, and termination. (3 sch: 2 hr. lecture, 2 hr. lab)

**Prerequisites:** Fundamentals of Operational Procedures in Food Service (FPV 1113), Management Procedures and Recordkeeping (FPV 1123), Food Service Sanitation (FPV 1213), Culinary Arts I (FPV 1315), Culinary Arts II (FPV 1326), Front of the House (FPV 1413), Purchasing and Storage (FPV 2223), Catering Management (FPV 2515), Menu Planning and Cost Control (FPV 2613), and Nutrition (FPV 2713)

**Corequisite:** Bakery Production and Management (FPV 2336) or permission by the instructor

<b>Competencies and Suggested Objectives</b>	
1.	Describe the qualifications, duties, and responsibilities of a successful food service manager in dealing with human resources. <ol style="list-style-type: none"> <li>Outline major issues to consider when recruiting, interviewing, and hiring employees.</li> <li>Demonstrate management responsibilities dealing with human resources, such as orientation and communication, training, scheduling, job evaluations, and employee performance ratings.</li> </ol>
2.	Differentiate among the various types of incentive programs. <ol style="list-style-type: none"> <li>Discuss trends in compensation and benefits planning for food service employees.</li> <li>Identify the roles of compensation and benefits packages in the reward system.</li> </ol>
3.	Differentiate between job descriptions and job specifications. <ol style="list-style-type: none"> <li>Critique various food service job descriptions and job specifications.</li> <li>Create at least one job description and job specification.</li> </ol>
4.	Explain the role of management in disciplinary and termination actions. <ol style="list-style-type: none"> <li>Explain the concept and benefits of progressive discipline.</li> <li>Outline the steps involved in the discipline process.</li> <li>Identify acceptable procedures in the termination process.</li> </ol>

## STANDARDS

### *ServSafe*<sup>®</sup> Course Content

SS10 Food Safety Systems

SS12 Food Safety Regulation and Standards

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*Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

**SUGGESTED REFERENCES**

- Khan, M. A. (1991). *Foodservice operations and management* (2<sup>nd</sup> ed.). Hoboken, NJ: Wiley.
- National Restaurant Association Educational Foundation. (2007). *ManageFirst hospitality and restaurant management*. Upper Saddle River, NJ: Pearson Prentice Hall.
- National Restaurant Association Educational Foundation. (2007). *ManageFirst human resources management and supervision*. Upper Saddle River, NJ: Pearson Prentice Hall.
- National Restaurant Association Educational Foundation. (2007). *ManageFirst controlling foodservice costs*. Upper Saddle River, NJ: Pearson Prentice Hall.

**Course Name:** Supervised Work Experience in Food Production and Management Technology I

**Course Abbreviation:** FPV 291(1-3)

**Classification:** Vocational-Technical Elective

**Description:** A course that is a cooperative program between industry and education and is designed to integrate the student's technical studies with industrial experience. Variable credit is awarded on the basis of one semester hour per 45 industrial contact hours. (1-3 sch: 3-9 hr. externship)

**Prerequisite:** Consent of instructor

<b>Competencies and Suggested Objectives</b>	
1. Utilize employability skills.	<ul style="list-style-type: none"> <li>a. Research employment outlook for the food service industry.</li> <li>b. Discuss responsibilities and characteristics related to professional success.</li> <li>c. Prepare a résumé, letter of application, and letter of resignation.</li> <li>d. Demonstrate job interview skills.</li> <li>e. Utilize the computer and Internet for job search and résumé development.</li> </ul>
2. Apply technical skills needed to be a viable member of the workforce.	<ul style="list-style-type: none"> <li>a. Prepare a description of technical skills to be developed in the supervised work experience.</li> <li>b. Develop technical skills needed to be a viable member of the workforce.</li> <li>c. Apply skills developed in other program area courses.</li> </ul>
3. Develop, in coordination with instructor and employer, written occupational objectives to be accomplished.	<ul style="list-style-type: none"> <li>a. Outline written occupational objectives in the supervised work experience.</li> <li>b. Perform written occupational objectives in the supervised work experience.</li> </ul>
4. Assess accomplishment of objectives.	<ul style="list-style-type: none"> <li>a. Prepare daily written assessment of accomplishment of objectives.</li> <li>b. Present weekly written reports to instructor in activities performed and objectives accomplished.</li> </ul>

## STANDARDS

### *ServSafe® Course Content*

- SS1 Providing Safe Food
- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS6 The Flow of Food: Purchasing and Receiving
- SS7 The Flow of Food: Storage
- SS8 The Flow of Food: Preparation

- SS9 The Flow of Food: Service
- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

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*Related Academic Standards*

---

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness
- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills

CS6 Interpersonal and Self-Directional Skills

### SUGGESTED REFERENCES

ACT Discover 2007. (n.d.). Retrieved September 6, 2007, from <https://actapps.act.org/eDISCOVER/>

Kennedy, J. L. (2007). *Resumes for dummies* (5<sup>th</sup> ed.). Hoboken, NJ: Wiley.

*National Restaurant Association Educational Foundation*. (n.d.). Retrieved September 17, 2007, from <http://www.nraef.org/>

U.S. Department of Labor. (2006). *Occupational outlook handbook (OOH), 2006-2007 edition*. Retrieved September 6, 2007, from <http://www.bls.gov/oco/>



**Course Name:** Supervised Work Experience in Food Production and Management Technology II

**Course Abbreviation:** FPV 292(1-3)

**Classification** Vocational-Technical Elective

**Description:** This course is a continuation of Supervised Work Experience in Food Production and Management Technology I. It is a cooperative program between industry and education and is designed to integrate the student's technical studies with industrial experience. Variable credit is awarded on the basis of one semester hour per 45 industrial contact hours. (1-3 sch: 3-9 hr. externship)

**Prerequisite:** Supervised Work Experience in Food Production and Management Technology I [FPV 291(1-3)] or by consent of instructor

<b>Competencies and Suggested Objectives</b>	
1. Utilize employability skills.	<ul style="list-style-type: none"> <li>a. Discuss responsibilities and characteristics related to professional success.</li> <li>b. Prepare a resumé, letter of application, and letter of resignation.</li> <li>c. Demonstrate job interview skills.</li> <li>d. Utilize the computer and Internet for job search and resume development.</li> </ul>
2. Apply technical skills needed to be a viable member of the workforce.	<ul style="list-style-type: none"> <li>a. Prepare a description of technical skills to be developed in the supervised work experience.</li> <li>b. Develop technical skills needed to be a viable member of the workforce.</li> <li>c. Apply skills developed in other program area courses.</li> </ul>
3. Develop, in coordination with instructor and employer, written occupational objectives to be accomplished.	<ul style="list-style-type: none"> <li>a. Outline written occupational objectives in the supervised work experience.</li> <li>b. Perform written occupational objectives in the supervised work experience.</li> </ul>
4. Assess accomplishment of objectives.	<ul style="list-style-type: none"> <li>a. Prepare daily written assessment of accomplishment of objectives.</li> <li>b. Present weekly written reports to instructor in activities performed and objectives accomplished.</li> </ul>

## STANDARDS

### *ServSafe<sup>®</sup> Course Content*

- SS1 Providing Safe Food
- SS2 The Microworld
- SS3 Contamination, Food Allergens, and Foodborne Illness
- SS4 The Safe Foodhandler
- SS5 The Flow of Food: An Introduction
- SS6 The Flow of Food: Purchasing and Receiving

- SS7 The Flow of Food: Storage
- SS8 The Flow of Food: Preparation
- SS9 The Flow of Food: Service
- SS10 Food Safety Systems
- SS11 Sanitary Facilities and Pest Management
- SS12 Food Safety Regulation and Standards

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*Related Academic Standards*

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- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)
- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations
- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)
- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)
- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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*21<sup>st</sup> Century Skills*

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- CS1 Global Awareness

- CS2 Financial, Economic, and Business Literacy
- CS3 Civic Literacy
- CS4 Information and Communication Skills
- CS5 Thinking and Problem-Solving Skills
- CS6 Interpersonal and Self-Directional Skills

## SUGGESTED REFERENCES

ACT Discover 2007. (n.d.). Retrieved September 6, 2007, from <https://actapps.act.org/eDISCOVER/>

Kennedy, J. L. (2007). *Resumes for dummies* (5<sup>th</sup> ed.). Hoboken, NJ: Wiley.

*National Restaurant Association Educational Foundation*. (n.d.). Retrieved September 17, 2007, from <http://www.nraef.org/>

U.S. Department of Labor. (2006). *Occupational outlook handbook, 2006-2007 edition*. Retrieved September 6, 2007, from <http://www.bls.gov/oco/>

## Recommended Tools and Equipment

### CAPITALIZED ITEMS

1. Booster, hot water (1)
2. Cabinet, food warmer (2)
3. Cash register (1)
4. Chopper or processor, food (1)
5. Cooker, steam with trunion (1)
6. Counter, work (1)
7. Dishwasher, commercial (1)
8. Disposal, garbage (3)
9. Filter, cooking oil (1)
10. Freezer (1)
11. Griddle (1)
12. Grill, fryer unit (2)
13. Machine, ice making with storage bin (1)
14. Machine, slicing food (1)
15. Mixer, food (1)
16. Oven, gas (2)
17. Pans, set for cooking (1)
18. Refrigerator, electric commercial (1)
19. Portable refrigerator (1)
20. Sink, kitchen, double compartment (2)
21. Sink, kitchen, three compartment (1)
22. Stand, utility (1)
23. Station, waitress, nourishment, and ice (1)
24. Institution/commercial gas stove (3)
25. Table, set of dish storage racks (1)
26. Work table, stainless (6)
27. Industrial fryer cooker (1)
28. Roll-in refrigerator cabinet (1)
29. Walk-in cooler freezer (1)
30. Refrigerator, pass-through slide door (1)
31. Gas charbroiler with stand (1)
32. Mixer, 20 qt. with access (1)
33. Student computer with printer and Internet access (1 per 4 students)
34. Teacher computer with printer and Internet access (1)
35. Tilt fryer unit (1)
36. Exhaust system with air exchanger and fire extinguisher (1)

### NON-CAPITALIZED ITEMS

1. Cabinet, supply (2)
2. Machine, clothes dryer (1)
3. Microwave oven (1)

4. Scales, laboratory (1)
5. Washer, heavy-duty (1)
6. Cashier stand 24-in. x 30-in. x 36-in., 1 drawer (1)
7. 1 rack with casters, 20 pan capacity (2)
8. Baker scale/dough scale (1)
9. Calculator, 12-digit, with printer/display (1)
10. Cart, food service (4)
11. Roasting pan set, 21 qt. capacity (1)
12. Electric stainless knife sharpener (1)
13. Pot with faucet and strainer, 10 gal. (1)
14. Coffee brewer with 2 warmers (1)
15. Lamp, heat (1)
16. Pot shelving wall or hanging rack (2)
17. Menu board with glass door pedestal (1)
18. Portable ingredients bins (6)
19. Locker 12 x 12 x 12 (1)
20. Blender mixer (1)
21. Stand mixer (6)
22. Garbage cans with dollies (2)
23. Pot stock with cover, 15 gal. (2)
24. Soup bowl (10 doz)
25. Monkey dish (10 doz)
26. Soup cup (10 doz)
27. 6-in. bread and butter plates (10 doz)
28. 7-in. salad plate (10 doz)
29. 9-in. dinner plate (10 doz)
30. 12-in. dinner platter (10 doz)
31. Coffee cups (10 doz)
32. Saucers (10 doz)
33. 6-oz water glasses (10 doz)
34. 10-oz drinking glasses (10 doz)
35. Salt and pepper sets (20 sets)
36. 60-oz water pitcher (20)
37. Gumbo spoons (10 doz)
38. Bouillon spoon (10 doz)
39. Teaspoon (10 doz)
40. Pasta spoon (10 doz)
41. Cocktail fork (10 doz)
42. Salad fork (10 doz)
43. Dinner fork (10 doz)
44. Bread knife (10 doz)
45. Steak knife (10 doz)
46. Boning knife (1 doz)
47. Pairing knife (1 doz)
48. 6-in. fillet knife (1 doz)
49. 8-in. chef knife (1 doz)

50. 10-in. chef knife (1 doz)
51. 14-in. beef slicer (6)
52. Serrated slicer (6)
53. Butcher knife (4)
54. Double boiler set, 4 to 36 quarts (2 sets)
55. 18 x 26 in. sheet pan (24)
56. 18 x 13 in. sheet pan (12)
57. Steam table pans with lids, full size, 2-in., 4-in., 6-in. (12 of each)
58. Steam table pans with lids, half size, 2-in., 4-in., 6-in. (12 of each)
59. Muffin pans (6)
60. Pie tins (12)
61. Cake pans (6)
62. Spring form pans (6)
63. 1 cup measuring cup (6)
64. 1 quart measuring cup (6)
65. 1 gal. measuring cup (6)
66. 1/8 – 1/2oz measuring spoon set (12 sets)
67. 12-in. cutting board (6)
68. Stainless steel bowls, assorted sizes (6 sets)
69. Can opener, table mounted (1)
70. Can opener, hand held (6)
71. Spoons, Slotted, 18-in. (12)
72. Spoons, solid, 18-in. (12)
73. Spoons, perforated, 18-in. (12)
74. Thermometer, candy (1)
75. Mop sink (1)
76. Utility knife (6)
77. Cleaver knife (6)
78. Oyster knife (6)
79. Clam knife (6)
80. Vegetable peeler (1 doz)
81. Digital instant-read thermometer (2)
82. Pie server (6)
83. Rolling pin (3)
84. Strainer (6)
85. Pastry bag and tubes (3 sets)
86. 8-in. tongs (6)
87. 12-in. tongs (6)
88. 10-in. tongs (6)
89. Wire whisk (12)
90. Spatulas, offset (12)
91. Spatulas, straight (12)
92. Turners (12)
93. Scoops, portion (dishers) assorted sizes (6 of each size)
94. Pastry wheels (8)
95. Ladles, assorted sizes (12 of each size)

96. Collanders, assorted sizes (6)
97. Pastry brushes (12)
98. Pastry wheel, calibrated (1)
99. Chafing dish set to include 1 stand, 1 water basin, 1 pan, and 1 cover (6)
100. 8- to 200-quart stock pots (6)
101. 6- to 60-quart sauce pots (6)
102. 11- to 30-quart brazier (2)
103. 1½- to 15-quart sauce pan (6)
104. 8-in. cast iron skillet (2)
105. 12-in. cast iron skillet (2)
106. 14-in. cast iron skillet (2)
107. 6- to 14-in. slope-sided pan (2)
108. Box grater (6)
109. Induction heating unit

#### RECOMMENDED INSTRUCTIONAL AIDS

It is recommended that instructors have access to the following items:

1. Overhead projector (1)
2. Data projector (1)
3. Screen (1)
4. 37-in. color TV
5. VCR/DVD
6. Camcorder for demonstrations
7. Digital camera

## Assessment

This program is assessed using the MS-CPAS. The following blueprint summary contains the courses/units that are measured when assessing this program. Courses/units are grouped into clusters, and a weight is given to each cluster to determine the number of items needed from each cluster. The numbers of C1s and C2s (item difficulty levels) are also indicated on the blueprint. This blueprint becomes effective Spring 2008.

CLUSTER/COMPETENCY	Level 1 (C1) Number	Level 2 (C2) Number	Total	%
Cluster 1: Food Service Fundamentals FPV 1113 Fundamentals of Operational Procedures in Food Service FPV 1213 Food Service Sanitation FPV 1413 Front of the House FPV 2713 Nutrition	29	10	39	39%
Cluster 2: Operational Procedures & Management FPV 1123 Management Procedures and Recordkeeping FPV 2223 Purchasing and Storage FPV 2613 Menu Planning and Cost Control	20	7	27	27%
Cluster 3: Culinary Arts I and II FPV 1315 Culinary Arts I FPV 1326 Culinary Arts II	26	8	34	34%
<b>TOTAL QUESTIONS:</b>	75	25	100	100%



## Appendix A: ServSafe® Course Content <sup>1</sup>

- SS1 Providing Safe Food
  - The Dangers and Prevention of Foodborne Illness
  - Preventing Foodborne Illness
  - How Food Becomes Unsafe
  - The Food Safety Responsibilities of a Manager
  
- SS2 The Microworld
  - Microbial Contaminants
  - Bacteria
  - Viruses
  - Parasites
  - Fungi
  
- SS3 Contamination, Food Allergens, and Foodborne Illness
  - Types of Foodborne Contamination
  - Deliberate Contamination of Food
  - Food Allergens
  
- SS4 The Safe Foodhandler
  - How Foodhandlers Can Contaminate Food
  - Components of a Good Personal Hygiene Program
  - Management's Role in a Personal Hygiene Program
  
- SS5 The Flow of Food: An Introduction
  - Preventing Cross-Contamination
  - Time and Temperature Control
  - Monitoring Time and Temperature
  
- SS6 The Flow of Food: Purchasing and Receiving
  - General Principles
  - Inspecting Food
  
- SS7 The Flow of Food: Storage
  - General Storage Guidelines
  - Types of Storage
  
- SS8 The Flow of Food: Preparation
  - Handling Food
  - Thawing Food Properly
  - Preparing Specific Food
  - Cooking Guidelines
  - Cooking Temperatures

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<sup>1</sup> National Restaurant Association. (2005). *ServSafe® course content*. Retrieved September 17, 2007, from [http://www.nraef.org/e\\_learning/servsafe.asp?flag=lcd&level1\\_id=6&level2\\_id=7&#overview](http://www.nraef.org/e_learning/servsafe.asp?flag=lcd&level1_id=6&level2_id=7&#overview)

Cooling Food  
Reheating Food

- SS9 The Flow of Food: Service  
Holding Food  
Serving Food Safely  
Types of Foodservice Operations
- SS10 Food Safety Systems  
Food Safety Programs  
Active Managerial Control  
HACCP  
Crisis Management
- SS11 Sanitary Facilities and Pest Management  
Facilities and Equipment  
Cleaning and Sanitizing  
Integrated Pest Management
- SS12 Food Safety Regulation and Standards  
Government Regulatory System for Food  
The Food Code  
Foodservice Inspection Process

## Appendix B: Related Academic Standards<sup>2</sup>

### Reading

- R1 Interpret Graphic Information (forms, maps, reference sources)
- R2 Words in Context (same and opposite meaning)
- R3 Recall Information (details, sequence)
- R4 Construct Meaning (main idea, summary/paraphrase, compare/contrast, cause/effect)
- R5 Evaluate/Extend Meaning (fact/opinion, predict outcomes, point of view)

### Mathematics Computation

- M1 Addition of Whole Numbers (no regrouping, regrouping)
- M2 Subtraction of Whole Numbers (no regrouping, regrouping)
- M3 Multiplication of Whole Numbers (no regrouping, regrouping)
- M4 Division of Whole Numbers (no remainder, remainder)
- M5 Decimals (addition, subtraction, multiplication, division)
- M6 Fractions (addition, subtraction, multiplication, division)
- M7 Integers (addition, subtraction, multiplication, division)
- M8 Percents
- M9 Algebraic Operations

### Applied Mathematics

- A1 Numeration (ordering, place value, scientific notation)
- A2 Number Theory (ratio, proportion)
- A3 Data Interpretation (graph, table, chart, diagram)
- A4 Pre-Algebra and Algebra (equations, inequality)
- A5 Measurement (money, time, temperature, length, area, volume)
- A6 Geometry (angles, Pythagorean theory)
- A7 Computation in Context (whole numbers, decimals, fractions, algebraic operations)
- A8 Estimation (rounding, estimation)

### Language

- L1 Usage (pronoun, tense, subject/verb agreement, adjective, adverb)
- L2 Sentence Formation (fragments, run-on, clarity)
- L3 Paragraph Development (topic sentence, supporting sentence, sequence)
- L4 Capitalization (proper noun, titles)
- L5 Punctuation (comma, semicolon)
- L6 Writing Conventions (quotation marks, apostrophe, parts of a letter)

### Spelling

- S1 Vowel (short, long)
- S2 Consonant (variant spelling, silent letter)
- S3 Structural Unit (root, suffix)

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<sup>2</sup> CTB/McGraw-Hill LLC. (1994). *Tests of adult basic education, Forms 7 and 8*. Monterey, CA: Author. Reproduced with permission of CTB/McGraw-Hill LLC. TABE is a registered trademark of The McGraw-Hill Companies, Inc. Copyright © 1994 by CTB/McGraw-Hill LLC. Reproduction of this material is permitted for educational purposes only.

## Appendix C: 21<sup>st</sup> Century Skills<sup>3</sup>

### CS1 Global Awareness

- Using 21<sup>st</sup> century skills to understand and address global issues
- Learning from and working collaboratively with individuals representing diverse cultures, religions, and lifestyles in a spirit of mutual respect and open dialogue in personal, work, and community contexts
- Promoting the study of non-English language as a tool for understanding other nations and cultures

### CS2 Financial, Economic, and Business Literacy

- Knowing how to make appropriate personal economic choices
- Understanding the role of the economy and the role of business in the economy
- Applying appropriate 21<sup>st</sup> century skills to function as a productive contributor within an organizational setting
- Integrating oneself within and adapting continually to our nation's evolving economic and business environment

### CS3 Civic Literacy

- Being an informed citizen to participate effectively in government
- Exercising the rights and obligations of citizenship at local, state, national, and global levels
- Understanding the local and global implications of civic decisions
- Applying 21<sup>st</sup> century skills to make intelligent choices as a citizen

### CS4 Information and Communication Skills

- Information and media literacy skills: Analyzing, accessing, managing, integrating, evaluating, and creating information in a variety of forms and media; understanding the role of media in society
- Communication skills: Understanding, managing, and creating effective oral, written, and multimedia communication in a variety of forms and contexts

### CS5 Thinking and Problem-Solving Skills

- Critical thinking and systems thinking: Exercising sound reasoning in understanding and making complex choices, understanding the interconnections among systems
- Problem identification, formulation, and solution: Ability to frame, analyze, and solve problems
- Creativity and intellectual curiosity: Developing, implementing, and communicating new ideas to others, staying open and responsive to new and diverse perspectives

### CS6 Interpersonal and Self-Directional Skills

- Interpersonal and collaborative skills: Demonstrating teamwork and leadership, adapting to varied roles and responsibilities, working productively with others, exercising empathy, respecting diverse perspectives
- Self-direction: Monitoring one's own understanding and learning needs, locating appropriate resources, transferring learning from one domain to another
- Accountability and adaptability: Exercising personal responsibility and flexibility in personal, workplace, and community contexts; setting and meeting high standards and goals for one's self and others; tolerating ambiguity

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<sup>3</sup> 21<sup>st</sup> century skills. (n.d.). Washington, DC: Partnership for 21<sup>st</sup> Century Skills.

- Social responsibility: Acting responsibly with the interests of the larger community in mind; demonstrating ethical behavior in personal, workplace, and community contexts