

**KAPI'OLANI COMMUNITY COLLEGE
PROGRAM REVIEW**

**FOOD SERVICE
2006**

Based on data for Fall 2003 through Spring 2006

Table of Contents

Mission Statement 2003-2010	1
Part I. Executive Summary of Program Status	2
Part II. Program Description	2
Part III. Quantitative Indicators for Program Review.....	15
Part IV. Curriculum Review and Revision	18
Part V. Analysis of Program	21
Appendix Data Elements	25

Mission Statement 2003-2010

Approved October 7, 2002 by KCC Faculty Senate

Kapi'olani Community College...

- is a gathering place where Hawai'i's cultural diversity is celebrated, championed and reflected in the students, faculty, staff, administration and curriculum.
- is a nurturing workplace of choice for strong and caring faculty, staff, and administrators committed to a shared vision and set of values.
- strives to be the first choice for education and training for Hawai'i's people.
- provides open access, and promotes students' progress, learning and success with low tuition and high quality instructional programs, student development and support services, and selective areas of excellence and emphasis.
- prepares students to meet rigorous baccalaureate requirements and personal enrichment goals by offering a high quality liberal arts program.
- prepares students to meet rigorous employment and career standards by offering 21st century career programs.
- prepares students for lives of ethical, responsible community involvement by offering opportunities for increased civic engagement.
- leads locally, nationally and internationally in the development of integrated international education through global collaborations.
- uses human, physical, technological and financial resources effectively and efficiently to achieve ambitious educational goals.
- builds partnerships within the University and with other educational, governmental, business, and non-profit organizations to support improved learning from preschool through college and lifelong.
- uses cycles of qualitative and quantitative assessment to document degrees of progress in achieving college goals and objectives.

The mission of Kapi'olani Community College's Culinary Program is to provide a quality education in the culinary and pastry arts with an emphasis on blending the classical techniques with the global influences of our unique geographic location. This mission is achieved through a progressive curriculum, operational excellence, multi-industry alliances and the promotion of lifelong learning.

Part I. Executive Summary of Program Status

This is the first report of the newly developed three-year program review. There are no recommendations from previous reports to discuss at this time.

Part II. Program Description

DESCRIPTION

The Food Service program provides students with program options and specialization's in culinary and patisserie arts.

The Certificate of Completion program options are designed to help students acquire technical skills, qualifying them for entry-level employment after one semester's training, whereas the Certificate of Achievement program options are attained after three semesters. These courses are the basic first, second, and third semester requirements for the corresponding A.S. Degrees. This provides students with an option in their educational and career planning. Students choosing to exit the program may re-enter at any time but must follow the current program in effect, not the one they exited from. The strength of the Culinary and Patisserie Programs continues to be the reinforcement of theory through applied academics in active laboratory settings.

GOALS

The major objective of the Culinary and Patisserie programs is to prepare students both technically and academically for careers in the culinary and hospitality industries. The program is concerned with both the student's acquisition of technical skills and knowledge and with their overall growth and development as individuals. The program endeavors:

- to expose students to the actual day-to-day world of the Culinary and Pastry Arts..
- to acquaint students with a wide variety of equipment, techniques and technologies used in the industry.
- to prepare students for job placement and career planning.
- to provide opportunities for students wishing transfer to four-year college programs.
- to provide a career ladder which provides career enhancement for Culinary and Pastry arts.

History and Admission Requirements

HISTORY

The Food Service training program began in 1949 with a five-week class for waiters/waitresses, sponsored by the Territorial Department of Public Instruction. Classes were offered continuously, first at Palama Settlement facilities, then moving to the Ala Wai clubhouse building on Kapi'olani Boulevard. In 1957, classes in Commercial Cooking and Purchasing were added, increasing the enrollment to 40 students with 3 instructors. The program was relocated to the KCC-Pensacola Campus in 1968, where 6 full-time instructors taught 90 to 100 program majors.

The Hotel Operations program (HOPER) at Kapi'olani Community College was established in 1971 as part of the Hotel and Restaurant program. In 1973 the program was moved to the Business Education division at KCC, and in 1991, was merged with the Food Service Education department to form the Department of Food Service and Hospitality Education, as it is known today.

With the growth of Hawaii's visitor industry, further expansion took place, and by 1978, students were attending classes during both the day and the evening. Sixteen full-time and part-time instructors taught 44 sections of 18 courses each semester.

In 1986, planning was initiated for major curriculum revisions in both the Food Service and Hotel Operations programs. The proposed changes were based on 1) the results of the employer and former-student surveys conducted by the College, 2) a comparison of various curricula/programs offered by similar institutions, 3) the suggestions and recommendations made by the faculty and industry representatives during interviews, 4) the recommendations made by the advisory committee members, 5) the accreditation criteria set by various food service professional associations, and 6) an in-depth review of literature/studies relating to employment projection and trends.

In August 1988 the Ohi'a building, the first of two buildings that housed the food service program was completed and two courses were conducted in this new building while the rest of the program remained on the Pensacola Campus. This 36,311 square foot facility, also known as the Campus Center Building, houses a student cafeteria and coffee shop both used as training kitchens for short order cookery and quantity food preparation. The building also includes a beginning food preparation lab and a demonstration kitchen and auditorium. This building was constructed at the cost of \$4.76 million.

In August 1990 the 'Ohelo Building, the second of the two buildings that housed the food service program was completed and at that time, the remaining program moved from the Pensacola Campus over to the Diamond Head Campus. This main food service instructional building with 32,400 square feet, includes intermediate and advanced food service training kitchens and laboratories, a fine dining restaurant and banquet facilities. Other special kitchens include the Asian Pacific kitchen, baking laboratory, a bakery outlet, confectionery kitchen, garden manger laboratory, meat and seafood laboratory and an advanced chefs training kitchen. Total construction costs were \$4.36 million.

Program revisions were implemented in Fall, 1990.

The Hotel and Travel classroom building was completed in January 1993 and the Hotel

operations and Travel and Tourism Programs moved into the facilities in Summer, 1994.

In September, 1993, a curriculum proposal was submitted to propose changes in the Culinary Arts Program in order to meet American Culinary Federation Accreditation requirements.

In 1994, the Certificate of Achievement in Culinary Arts program and the Associates of Science Degree in Culinary Arts and the Associates of Science Degree in Patisserie programs received a 5-year accreditation from the American Culinary Federation. There were 15 full-time faculty and 4 lecturers teaching 45 sections of 25 courses in Culinary Arts, Hotel Operations and Travel and Tourism programs.

In Fall 1996, an updated and revised Hotel/Restaurant Operation and a revised Travel and Tourism program were proposed and passed by the curriculum committee.

Effective Fall 2001, the Food Service and Hospitality Education Department split into two departments to allow growth for both. As part of the campus reorganization, the non-credit counterparts of each became part of the respective departments. This has allowed the culinary arts department to expand the non-credit offerings from community, International, and industry continuing education programs to additional programs in contract training programs with military and industry organizations, and advanced professional development culinary programs. These added initiatives required the department to hire more faculty, bringing the culinary arts department to 20 FTE teaching 80 sections of 32 courses in culinary arts. Block scheduling was also initiated in Fall 2001 to allow students to complete their program of study in a timely manner.

Due to a reduction in job opportunities within the food service industry caused by both the after effects of the 9/11 disaster on tourism and the recessionary economic climate of the United States and Japan, the enrollment declined sharply. All efforts to institute block scheduling were put on hold, and the additional staff that had been brought on-board were furloughed.

ADMISSION REQUIREMENTS

Program admission is based on a first-qualified, first-accepted basis.

The minimum qualifications for admission are:

- 18 years of age or older
- A high-school diploma or GED if less than 18 years of age

DEGREE REQUIREMENTS

Food Service Curriculum

Associate in Science Degree with a Specialization in Culinary Arts (69-71 semester credits)

The Associate in Science degree, Culinary Arts, is a four-semester and one-summer session program of study. This program option is designed for students who are interested in becoming chefs and those that intend to transfer to a four-year college. The challenge provided each A.S. degree candidate will be to apply the knowledge gained in courses taken in the Certificate of Completion program and the Certificate of Achievement program to operate and manage a food service operation as a profit center. Students completing either the CA or the A.S. degree program requirements will be eligible for membership and certification by the American Culinary Federation upon completion of one year of work experience in industry. Please refer to the "Degree and Certificate Programs" section for lists of A.S. Humanities, A.S. Natural Science, and A.S. Social Science courses.

Upon successful completion of the A.S. degree program, in addition to demonstrating his or her mastery of the competencies required for the Certificate of Achievement in Culinary Arts and the A.S. degree competencies in general education, the student should be able to apply the knowledge gained from all the prerequisite courses to operate and manage an on-campus food service operation as a profit center.

Students choosing to continue in the A.S. degree program in Food Service with an option in Culinary Arts must complete the Certificate of Achievement in Culinary Arts with a 2.0 G.P.A. or higher.

<i>First Semester</i>	<i>Credits</i>
FSHE 197B Introduction to the Culinary Industry/Career Preparation	2
FSHE 103, Sanitation and Safety	2
FSHE 110, Fundamentals of Cookery	5
FSHE 119, Intermediate Cookery	5
MATH 100, Survey of Mathematics or higher, OR	3
BUS 100, Using Mathematics to Solve Business Problems, OR	
PHIL 110, Introduction to Logic, OR	
QM 252, Applied Math in Business	
<i>Semester Total</i>	<i>17</i>
<i>Second Semester</i>	<i>Credits</i>
FSHE 122, Fundamentals of Baking	5
FSHE 209, Garde Manger	4
FSHE 241, Hospitality Purchasing/Cost Control	5
ENG 100, Expository Writing, OR	3
ENG 160, Business and Technical Writing	
<i>Semester Total</i>	<i>17</i>
<i>Summer Session</i>	<i>Credits</i>
SP 151, Personal and Public Speech, OR	3
SP 145, Interpersonal Communication	
<i>Semester Total</i>	<i>3</i>
<i>Third Semester</i>	<i>Credits</i>
FSHE 128, Dining Room Service/Stewarding Procedures	5
FSHE 212, Continental Cuisine	5
FSHE 185, The Science of Human Nutrition	3
FSHE 290, Hospitality Management	3
FSHE 120, Menu Merchandising	2
<i>Semester Total</i>	<i>18</i>

<i>Fourth Semester</i>	<i>Credits</i>
FSHE 216, Asian/Pacific Cuisine	5
FSHE 294, Food Service Practicum, OR	5
FSHE 293E, Hospitality Internship	3
A.S. Social Science (100 level or higher)	3
A.S. Humanities (100 level or higher)	3
<i>Semester Total</i>	<i>14 or 16</i>
TOTAL CREDITS	69-71

Note: For the A.S. degree, a grade of “C” or higher is required in all FSHE courses.

Note: First Aid and CPR Certification is required to meet graduation requirements; may be achieved by successful completion of an approved course from Kapi’olani Community College or the American Red Cross.

Associate in Science Degree with a Specialization in Patisserie (60-62 semester credits)

The Associate in Science degree in Patisserie is a four semester program of study. This program option is designed for students who are interested in becoming professional bakers and pastry chefs. It offers an in-depth study of the fundamentals of baking, patisserie, and confiserie skills. The baking and confiserie laboratory with state-of-the art equipment provides the students with the opportunity to apply and practice their skills. Students completing the A.S. degree program requirements will be eligible for certification by the American Culinary Federation upon completion of one year work experience in industry. Please refer to the “Degree and Certificate Programs” section for lists of A.S. Humanities, A.S. Natural Sciences, and A.S. Social Science courses.

Upon successful completion of the four semester A.S. degree program, in addition to demonstrating mastery of the competencies required for the Certificate of Completion in Patisserie and the A.S. degree competencies in general education, the student should be able to:

- Prepare confectionery specialties using chocolate, sugar, and marzipan and produce items such as caramels, nougats, fondants, ganache, gianduja, molded marzipans, pastillage, etc.
- Identify, operate safely, and properly maintain equipment that is typically used in a confiserie such as: candy-making ranges, tools, thermometers, copper kettles, chocolate tempering equipment, and other hand tools used in preparing candy.
- Demonstrate knowledge of a variety of table service techniques and of the various stewarding functions.
- Utilize menu planning principles as an effective management tool to plan production, scheduling, and merchandising.
- Demonstrate the proper procedures for ordering, receiving, storing, issuing, and controlling foods and supplies and utilize an established computerized cost control system to generate financial and control reports.
- Identify the managerial functions of planning, organizing, staffing, directing, and controlling to bring about organizational effectiveness.
- Apply sound nutrition principles to menu planning, production, and storage procedures as to maximize nutrient retention and control the use of nutrients that promote health and nutrition.

Students choosing to continue in the A.S. degree program in Patisserie must complete the Certificate of Completion in Patisserie with a 2.0 G.P.A. or higher.

<i>First Semester</i>	<i>Credits</i>
FSHE 197B Introduction to the Culinary Industry/Career Preparation	2
FSHE 103, Sanitation and Safety	2
FSHE 122, Fundamentals of Baking	5
FSHE 222, Patisserie	5

MATH 100, Survey of Mathematics or higher, OR	3
BUS 100, Using Mathematics to Solve Business Problems, OR	
PHIL 110, Introduction to Logic, OR	
QM 252, Applied Math in Business	
<i>Semester Total</i>	<i>17</i>
<i>Second Semester</i>	<i>Credits</i>
FSHE 128, Dining Room Service/Stewarding Procedures	5
FSHE 110, Fundamentals of Cookery	5
ENG 100, Expository Writing, OR	3
ENG 160, Business and Technical Writing	
SP 151, Personal and Public Speech, OR	3
SP 145, Interpersonal Communication	
<i>Semester Total</i>	<i>16</i>
<i>Third Semester</i>	<i>Credits</i>
FSHE 224, Confiserie	5
FSHE 241, Hospitality Purchasing and Cost Control	5
A.S. Social Science (100 level or higher)	3
<i>Semester Total</i>	<i>13</i>
<i>Fourth Semester</i>	<i>Credits</i>
FSHE 290, Hospitality Management	3
FSHE 120, Menu Merchandising	2
FSHE 185, The Science of Human Nutrition	3
A.S. Humanities (100 level or higher)	3
* Accepted Electives	3-5
<i>Semester Total</i>	<i>14-16</i>
TOTAL CREDITS	60-62

Note: For the A.S. degree, a grade of “C” or higher is required in all FSHE courses.

ASSOCIATE IN SCIENCE DEGREE WITH A SPECIALIZATION IN SCHOOL FOOD SERVICE (60-62 Semester Credits)

Program Description: The Associate in Science degree, Food Service with a specialization in School Food Service, is a four-semester program of study. This program option is designed for students who are interested in becoming Food Service managers in schools. The students complete the same basic core and the major requirements required of the students in the Culinary Arts program and they specialize by enrolling in the School Food Service Record Keeping and School Food Service Internship courses. Please refer to the “Degree and Certificate Programs” section for lists of A.S. Arts & Humanities and A.S. Social Sciences courses.

The School Food Service option allows students to concentrate on developing skills needed to manage the food service operation in a school, college, or industrial cafeteria.

Program Competencies Upon successful completion of the A.S degree program in Food Service with a specialization in School Food Service, in addition to demonstrating mastery of the competencies required for the Certificate of Completion in Culinary Arts and the A.S. degree competencies in general education, the student should be able to:

- Adapt the concepts and techniques learned in European, Asian/Pacific, and American regional cuisines to provide variations in institutional menus.
- Utilize menu planning principles as an effective management tool to plan production scheduling and the selection, use, and maintenance of equipment for an efficient operation.

- Demonstrate the proper procedures for ordering, receiving, storing, issuing, and controlling foods and supplies and utilize an established computerized cost control system to generate financial and control reports.
- Apply sound nutrition principles to menu planning, food preparation, and storage procedures so as to maximize nutrient retention and promote and control the use of nutrients that promote health and nutrition.
- Insure the efficiency of an operation by the proper selection, use, and maintenance of equipment.
- Utilize computational and computer skills as required in the management of food service operations.
- Identify the managerial functions of planning, organizing, staffing, directing, and controlling to bring about organizational effectiveness.
- Describe the types of food services offered through the Department of Education in Hawai'i.
- Describe the meal patterns used in menu planning in School Food Service and explain why these patterns were developed.
- Using the U.S.D.A. and Hawai'i Buying Guide, calculate the quantities of food to be purchased and used in serving school meals.
- Adjust central menus to accommodate available Federal commodities.
- Use the forms developed for School Food Service recordkeeping.
- Utilize the Department of Education School Lunch Handbook to implement operational functions in a school food service facility.

A.S. DEGREE CURRICULUM

Food Service, School Food Service (60-62 credits)

General Education Requirements (18 credits)

ENG 100 or ENG 160 SP 145 or SP 151	Composition I Business and Technical Writing Interpersonal Communication Personal and Public Speech	3 3
AS/SS AS/AH	A.S. Social Sciences Elective (100 level or higher) A.S. Arts & Humanities Elective (100 level or higher)	3 3
BUS 100 or PHIL 110 or QM 252 or MATH 100 or higher level math FSHE 185	Using Mathematics to Solve Business Problems Introduction to Logic Applied Math in Business Survey of Mathematics The Science of Human Nutrition	3 3

School Food Service Support Course (3-5 credits)

FSHE 128 FSHE 209 (283) FSHE 216 (2IOr2II) or FSHE 245 or FSHE 294	Dining Room Service/Stewarding Procedures Garde Manger (Required for ACF Certification)or Asian/Pacific Cuisine Beverage Operations Food Service Practicum	3-5
---	--	-----

Food Service Requirements (39 credits)

FSHE 197B	Introduction to the Culinary Industry/Career Preparation	2
FSHE 103	Sanitation and Safety	2
FSHE 110	Fundamentals of Cookery	5
FSHE 119	Intermediate Cookery	5
FSHE 120 (288)	Menu Merchandising	2
FSHE 122	Fundamentals of Baking	5
FSHE 212 (214)	Continental Cuisine	5
FSHE 241	Hospitality Purchasing and Cost Control	5
FSHE 281	School Food Service Recordkeeping	2
FSHE 290	Hospitality Management	3
FSHE 293C	School Food Service Internship	3
TOTAL		60-62

Certificate of Achievement, Culinary Arts (44 semester credits)

The Certificate of Achievement, Culinary Arts, is a three-semester program of study. This program option is designed for students who are interested in gaining technical skills for skilled level positions in hotels, restaurants, and institutions. It provides students a solid foundation in concepts, skills, and techniques in cookery; it exposes them to the principles of menu planning, equipment use and maintenance, and station organization through mise-en-place. The strength of the Culinary Arts program is the reinforcement of the theories learned in class in a hands-on laboratory setting in the College's restaurant, bistro, and cafeteria. Successful completion of the Certificate of Achievement program plus one and one-half years of experience will qualify students to apply for certification through the American Culinary Federation.

Upon successful completion of the three semester program, in addition to demonstrating his or her mastery of the competencies required for the Certificate of Completion in Culinary Arts, the student should be able to;

- Refine, perfect, and expand techniques learned in the various culinary arts courses to combine and create a marriage of flavors of the various cuisines and create new dishes and styles of cooking.
- Incorporate grade manger principles into culinary techniques to enhance presentation.
- Demonstrate station organization with emphasis on mise-en-place and coordination resulting in prompt, efficient production and service.
- Demonstrate knowledge of a variety of table service techniques and of the other various stewarding functions.
- Apply sound nutrition principles to menu planning, food preparation, and storage procedures so as to maximize nutrient retention and promote and control the use of nutrients that promote health and nutrition.
- Utilize menu planning principles as an effective management tool to plan production, scheduling, and merchandising.
- Insure the efficiency of an operation by the proper selection, use, and maintenance of equipment.
- Demonstrate the proper procedures for ordering, receiving, storing, issuing, and controlling foods, beverages, and other related supplies, and utilize an established computerized cost control system to generate financial and control reports.
- Identify the managerial functions of planning, organizing, staffing, directing, and controlling to bring about organizational effectiveness.
- Demonstrate the ability to communicate clearly in writing.
- Administer first aid if someone needs it.

Students choosing to continue in the A.S. degree program in Food Service with an Option in Culinary Arts should complete MATH 100 or higher or QM 100, ENG 100 or 160, and the major course requirements in the Certificate of Achievement program with a 2.0 G.P.A. or higher.

<i>First Semester</i>	<i>Credits</i>
FSHE 197B Introduction to the Culinary Industry/Career Preparation	2
FSHE 103, Sanitation and Safety	2
FSHE 110, Fundamentals of Cookery	5
FSHE 119, Intermediate Cookery	5
MATH 24, Elementary Algebra or higher level of Math	3
<i>Semester Total</i>	<i>17</i>

<i>Second Semester</i>	<i>Credits</i>
FSHE 209, Garde Manger	4
FSHE 128, Dining Room Service/Stewarding Procedures	5
FSHE 185, The Science of Human Nutrition	3
ENG 22, Introduction to Expository Writing or higher level of English	3
<i>Semester Total</i>	<i>15</i>

<i>Third Semester</i>	<i>Credits</i>
FSHE 122, Fundamentals of Baking	5
FSHE 212, Continental Cuisine	5
FSHE 120, Menu Merchandising	2
<i>Semester Total</i>	<i>12</i>

TOTAL CREDITS **44**

Note: For the A.S. degree, a grade of “C” or higher is required in all FSHE courses.

Note: First Aid and CPR certification is required to meet graduation requirements. Certification may be achieved by successful completion of HLTH 130 if offered by KCC, or an approved American Red Cross course.

Certificate of Completion, Culinary Arts (17 semester credits)

The Certificate of Completion, Culinary Arts, is a one-semester program of study. Its primary objective is to prepare students for entry-level jobs in hotel, restaurant, cafeteria, and coffee shop kitchens. Basic technical cooking skills, the development of proper work habits and attitudes and professionalism, and the practice of safety and sanitation procedures are stressed. This program is recommended for students who wish to seek immediate employment in entry-level food preparation positions (i.e., cook’s helper, kitchen help, fry cook).

Upon successful completion of the Certificate of Completion program of study, the student should be able to:

- Practice the tenets of the Culinarian’s Code in daily work life.
- Identify the functions, job titles, work requirements, and operating procedures of the food, lodging, and transportation components of the hospitality industry.
- Determine the job qualifications, attitudes, work habits, and personal qualities necessary to function satisfactorily with other individuals and in organizations in the hospitality industry.
- Make informed decisions regarding job placement and career development in the hospitality industry.
- Apply the fundamental concepts and demonstrate the basic skills and techniques of cookery in the preparation of stocks, soups and sauces; meats, fish, and poultry; fruits, vegetables, and starches.
- Apply the fundamental skills and techniques of cookery to short order and quantity cookery.
- Maintain the work area and equipment in accordance with standards of safety and sanitation and demonstrate the proper use and care of equipment and supplies.
- Apply with accuracy, computational skills in food preparation.

	<i>Credits</i>
FSHE 197B Introduction to the Culinary Industry/Career Preparation	2
FSHE 103, Sanitation and Safety	2
FSHE 110, Fundamentals of Cookery	5
FSHE 119, Intermediate Cookery	5
MATH 24, Elementary Algebra or higher level of Math OR	3
MATH 50H, Technical Math/Food Service*	
<i>Semester Total</i>	<i>17</i>

Note: For certification, a grade of “C” or higher is required in all FSHE courses.

**Note:* Math 50H is not applicable to any A.S. degree in Food Service.

Certificate of Completion, Dining Room Service (17 semester credits)

The Certificate of Completion, Dining Room Service, is a one-semester program of study. Its primary objective is to prepare students to work in hotel dining rooms, banquet facilities, restaurants, and coffee shops. Dining room service and supervision techniques, sanitation and safety procedures, and the development of proper work habits, service attitudes, and effective communication skills are stressed. This program is recommended for students who wish to seek immediate employment as waiters/waitresses, host/hostesses, and bus-help.

Upon successful completion of the Certificate of Completion program of study, the student should be able to:

- Practice the tenets of the Culinarian’s Code in daily work life.
- Identify the functions, job titles, work requirements, and operating procedures of the food, lodging, and transportation components of the hospitality industry.
- Determine the job qualifications, attitudes, work habits, and personal qualities necessary to function satisfactorily with other individuals and in organizations in the hospitality industry.
- Make informed decisions regarding job placement and career development in the hospitality industry.
- Demonstrate knowledge of a variety of table service techniques and correctly serve guests using the various styles.
- Demonstrate knowledge of stewarding functions.
- Maintain the work area and equipment in accordance with standards of safety and sanitation and demonstrate the proper use and care of the equipment and supplies.
- Demonstrate the essential personal qualities, technical and service skills, and job attitudes required of food waiters and bus-help.
- Perform with accuracy, computational skills as required in the hospitality industry and in life experiences.

	<i>Credits</i>
FSHE 197B Introduction to the Culinary Industry/Career Preparation	2
FSHE 103, Sanitation and Safety	2
FSHE 128, Dining Room Service/Stewarding Procedures	5
FSHE 228, Dining Room Supervision	5
MATH 50H, Technical Math/Food Service (or higher)	3
<i>Semester Total</i>	<i>17</i>

Note: For certification, a grade of “C” or higher is required in all FSHE courses.

Certificate of Completion, Patisserie (17 semester credits)

The Certificate of Completion, Patisserie, is a one-semester program of study. Its primary objective is to prepare students for entry-level jobs in bakeries, hotel kitchens or patisseries. Technical baking skills, the development of proper work habits, attitudes, professionalism, and the practice of safety and sanitation

procedures are stressed. This program is recommended for students who wish to seek immediate employment in entry-level baking positions.

Upon successful completion of the Certificate of Completion program of study, the student should be able to:

- Practice the tenets of the Culinarian's Code in daily work life.
- Identify the functions, job titles, work requirements and operating procedures of the food, lodging and transportation components of the hospitality industry.
- Describe the job responsibilities of a pastry chef, baker, pastry cook and pastry helper.
- Determine the job qualifications, attitudes, work habits and personal qualities necessary to function satisfactorily with other individuals and in organizations in the hospitality industry.
- Make informed decisions regarding job placement and career development in the hospitality industry.
- Maintain the work area and equipment in accordance with standards of safety and sanitation and demonstrate the proper use and care of the equipment and supplies.
- Apply with accuracy, computational skills in food preparation and the conversion of recipes.
- Apply the fundamental concepts of baking and demonstrate the basic baking skills and techniques in preparing bakery items such as quick breads, yeast breads, rolled-in dough, pies, cakes, puddings and pastry creams.
- Apply advanced techniques in the preparation of gourmet specialties in breads, puff pastry, paté a choux, international pastries, petite fours, gateaux, Bavarian creams, soufflés and ice cream desserts.
- Decorate cakes.

	Credits
FSHE 197B Introduction to the Culinary Industry/Career Preparation	2
FSHE 103, Sanitation and Safety	2
FSHE 110, Fundamentals of Cookery	5
FSHE 122, Fundamentals of Baking	5
MATH 24, Elementary Algebra or higher level of Math OR	3
MATH 50H, Technical Math/Food Service*	
<i>Semester Total</i>	<i>17</i>

Note: For certification, a grade of "C" or higher is required in all FSHE courses.

*Note: Math 50H is not applicable to any A.S. degree in Food Service.

Kapi`olani Culinary Arts Faculty & Staff

Employee	Position/Title/Rank	Degree(s)
Akasaka, Sandra	Clerk II, HARIETT program	
Alfredo Cabacungan	Associate Professor	AA
Aaron Chau	Instructor	BA
Kusuma Cooray	Professor	
Kevin Donnelly	Lecturer	BA
Maiko Espiritu	Casual, International Coordinator	AS
Eddie Fernandez	Associate Professor	AS
Frank Gonzales	Casual, Non-credit Coordinator	AS, BA
Ernst Hiltbrand	Professor	
Henry Holthaus	Lecturer	
Grant Itomitsu	Lecturer	BS, RDE
Nina Jarrett	Lecturer	
Momi Kama	Cook III, Cafeteria	
Kristy Kiesel	Clerk III, Reservationist	
Frank Leake	Professor	AAS
Daniel Leung	Casual, Culinary Tourism	AS, BS, BSW, MSW
Barbara Liechty	Lecturer	BS, MPH
Lori Maehara	Associate Professor, Counselor	BBA
David Miyamoto	Lecturer	
Dale Radomski	Lecturer	AOS, BA
John Santamaria	Instructor/Coordinator, HARIETT/Apprenticeship	BS, MBM (Phillipines)
Grant Sato	Sous Chef, Commercial Enterprise	AS
Genevieve Seguirant	Cafeteria Manager	AS
Ronald Takahashi	Associate Professor, Department Chairperson	BBA, MBA
Edwin Timoteo	Instructor/Coordinator, Military Programs	BS, MSIS
Fern Tomisato	Professor	BBA
Alan Tsuchiyama	Assistant Professor	CA
Carol Uyemura	Office Manager- Commercial Enterprise	
Richard Wagner	Lecturer	B, MPZ (Austria)
Dan Wetter	Assistant Professor	AS
Holly Wheelles	General Cashier	AAS
Sally Yamaguchi	Administrative Assistant	
Keane Yorita	Food Service Purchaser, Commercial Enterprise	AS

ADVISORY COMMITTEES

2004-2005

John Alves Editor in Chief Honolulu Magazine	Cheryl Apo Assistant General Manger Hale Koa Hotel	Sam Choy Executive Chef/Owner Sam Choy's
Daniel Delbrel Executive Chef Sheraton Waikiki	David Fitzgerald Administrator Pohai Nani	Darryl Fujita Executive Chef Halekulani Hotel
Wayne Hirabayashi Executive Chef Kahala Mandarin Oriental	Wayne Iwaoka Professor/Food Science University of Hawaii	John Lopianetzky Food & Beverage Manager Pacific Beach Hotel
Gary Manago Executive Chef Hilton Hawaiian Village	George Mavrothalassitis Owner/Executive Chef Mavro's	Joan NamKoong Consultant
Faith Ogawa Owner/Executive Chef Faith & Friends	Franz Schaiier Executive Chef Halekulani	Goren Streng Executive Chef Hawaii Prince Hotel
Alan Suzuki Sales Executive Robert Mondavi Wines	Allan Takasaki Owner/Executive Chef Le Bistro	Jan Tsukazaki Plant Manager Napoleon Bakery
Linda Uyehara Voc-Ed Manager Farrington High School	Richard Viernes President Chef De Cuisine	Rolf Walter Executive Chef Hale Koa Hotel
Hans Weiler Consultant Y. Hanta Foods	Alan Wong Owner/Executive Chef Alan Wong's Restaurant	Thomas Wong Executive Chef Hotel Hana
Roy Yamaguchi Owner/Executive Chef Roy's Restaurant	Craig Yasaka Food & Beverage Manager Waikiki Beachcomber Hotel	Stanton Ho Executive Pastry Chef Las Vegas Hilton

Part III. Quantitative Indicators for Program Review

DATA
CREDIT
FOOD SERVICE
Demand

Enrollment / Admission	F05	F04	F03	F04-F05 Diff	% Change
Number of majors	364	352	411	12	3.41
Number of new majors	149	129	145	20	15.50
Number of applicants	199	238	286	-39	-16.39
Number of FTE majors	271.25	272.58	326.08	-1.33	-0.49
Number of FTE faculty	11.50	11.13	10.73	0.37	3.32
Number of student semester hours	3,255	3,271	3,913	-16	-0.49

Employment Opportunities	
Current positions	92,250
Projected positions	94,350
Average openings per year	3,560

Effectiveness

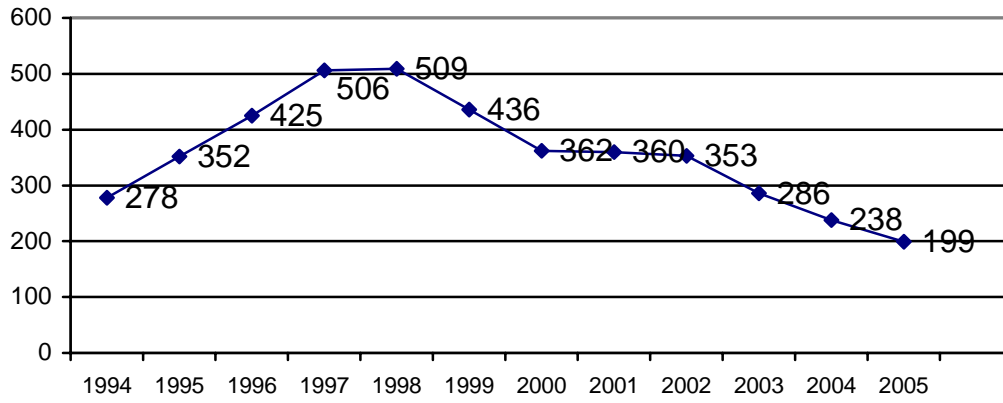
Satisfaction	
Students	3.11
Employers	3.08

Program	04-05	03-04	02-03	F04-F05 Diff	% Change
Leaver graduation rate	48.88%	53.70%	43.50%	-4.81	-8.96
Number of degrees/certificates awarded	219	276	241	-57	-20.65

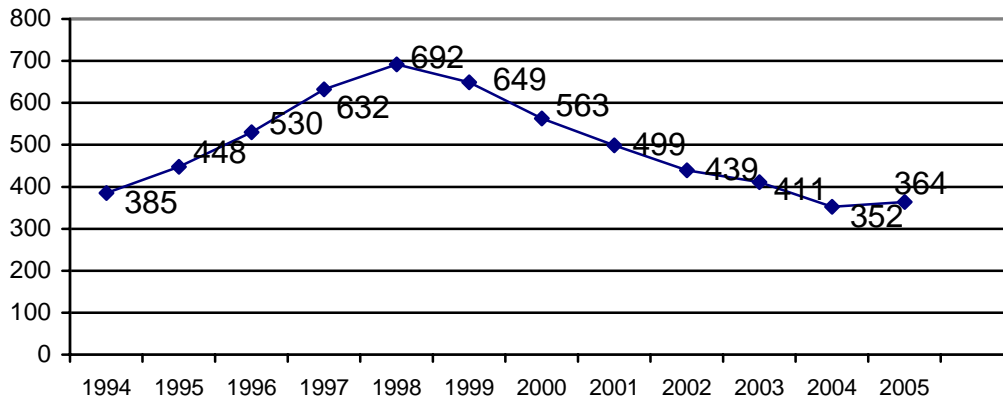
Efficiency

Program	F05	F04	F03	F04-F05 Diff	% Change
FTE students per FTE faculty	23.59	24.49	30.39	-0.90	-3.67
Average class size	20.72	17.59	22.03	3.13	17.79
Occupancy rate	85.77%	76.26%	85.40%	9.51	12.47

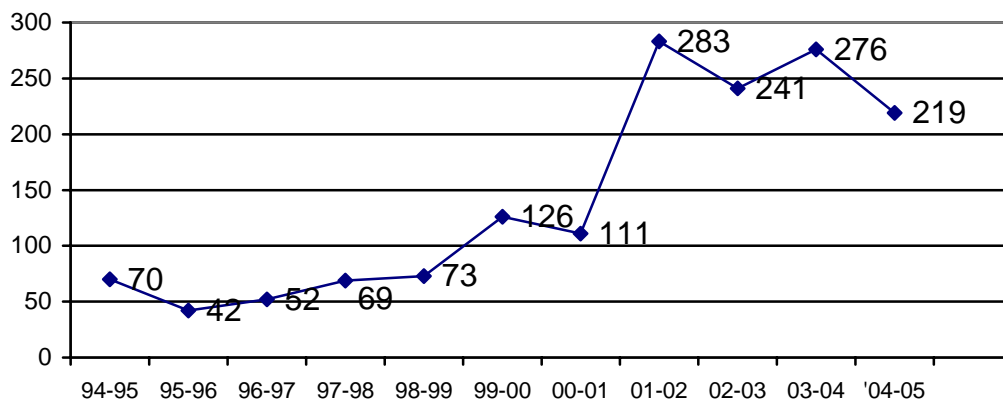
Applications



Majors



Graduation



More Data for Program Review
FOOD SERVICE

Demand

Enrollment	AY '05 - '06	AY '04 - '05	AY '03 - '04
Semester Hours for Program Majors in All Program Classes	3934	4278	4521
Student Semester Hours for All Program Classes	5,548	5,313	5,953
Number of Classes Taught	83	75	78
Semester Hours Taught	313	296	307

Effectiveness

Program	AY '05 - '06	AY '04 - '05	AY '03 - '04
Persistence of Majors (Fall to Spring)	67.88%	66.44%	55.23%
Transfer Rates (for Fall Cohorts)	NA	NA	NA
Success at Another UH 4-Year Campus (for Fall Cohorts)	NA	NA	NA

FSCA --Perkins Core Indicators	1P1	1P2	2P1	3P1	3P2	4P1	4P2
2002-2003	62.50	100.00	54.29	91.67	100.00		
2003-2004	61.90	81.82	63.64	89.47	94.12		
2004-2005	61.54	100.00	71.43	64.29	100.00		

FSER --Perkins Core Indicators	1P1	1P2	2P1	3P1	3P2	4P1	4P2
2002-2003	50.00	86.84	29.82	85.00	96.08		
2003-2004	59.57	81.51	57.14	67.65	82.61		
2004-2005	65.38	90.09	49.55	77.94	86.79		

Efficiency

Program	AY '05 - '06	AY '04 - '05	AY '03 - '04
Semester Hours Taught by Lecturers	111	83	85
Percent of Classes Taught by Lecturers	44.58%	38.67%	39.74%
FTE Workload	11.59	10.96	11.37

Part IV. Curriculum Review and Revision

AY 2003 – 2004

Experimental Course Proposals:

FSHE 197B: Introduction to the Culinary Industry/Career Preparation (2CR)

FSHE 197K; Intermediate Baking (5CR)

FSHE 198B: General Mess Operations (4CR)

FSHE 198C: Private Mess Operations (4CR)

FSHE 298N: Navy Food Service Administration (6 CR)

AY 2004 – 2005

New Course Proposals:

FSHE 102 Introduction to the Culinary Industry/Career Preparation (2 CR)

4 hours lecture per week for 8 weeks

Course Description:

This course provides an overview of the culinary industry within the aspects of the entire hospitality industry. It provides students with an introduction to the historical, social and cultural forces that have affected and shaped the industry of today. Students will identify job qualifications, professional standards, communication skills and attitudes essential for successful workers in the hospitality industry. Students will create a web-based electronic portfolio that will be utilized throughout their educational experience to demonstrate and showcase their learning outcomes.

Program Revisions:

In AY 2004-2005, we did submit a request to modify the list of required courses for the Associates of Science degree in Food Service with a specialization in Culinary Arts, Associates of Science degree in Food Service with a specialization in Patisserie, Associates of Science degree in Food Service with a specialization in School Food Service, Certificate of Achievement in Culinary Arts, Certificate of Completion in Culinary Arts, Certificate of Completion in Patisserie, and the Certificate of Completion in Dining Room Service replacing the FSHE 100 course with the new FSHE 102 course.

SPECIFIC ISSUES: As of Fall 2004, modifications made by the Hospitality Department to the FSHE 100 course (Career and Customer Service Skills), which had also been a required course for our Culinary Arts Program, created a situation whereas our program now fails to include instruction in all of the competencies mandated by the American Culinary Federation, our professional accrediting body.

BACKGROUND AND CONSEQUENCES: During the Summer of 2004, the Culinary Departments of each community college and the State Department of Education did meet and articulate both horizontally and vertically several of our food services courses, one of which was an "Introduction to Food Service" course. This course was crafted to meet the student learning outcome needs of each college in the ACF mandated areas of both an introduction to the hospitality industry and career pathway education. By articulating this class with the DOE, it provides high school students a running start on the pathway towards a certificate and/or degree in the Culinary Arts.

The Chairman of the Culinary Arts Department did meet with the Chairman of the Hospitality Education Department to see if it would be possible to reintroduce the required competencies into the current FSHE 100 course, but that would have meant that the Hospitality Students enrolled in that course would be duplicating outcomes learned from their FSHE 101 - Introduction to the Hospitality Industry course that could not be modified since in its current format, it is articulated with the TIM school at Manoa.

The Culinary Arts A.S. degree program is already at an extremely high credit level (69-71) required for graduation, which precludes adding in another course to cover the missing competencies. This left us with no option but to create a 2 credit course entitled, “**FSHE 102 Introduction to the Culinary Industry/Career Preparation**” that would include all of the competencies required by the ACF and meet the student learning outcomes as articulated with all of the other community college culinary programs and the Department of Education. This course would then replace the 2 credit FSHE 100 course that is currently required in all of our degree and certificate programs.

AY 2005 – 2006

New Course Proposals:

FSHE 124 Intermediate Baking (5 CR)

2 hours lecture, 26 hours lab per week for 8 weeks

Prerequisite(s): Grade of “C” or higher in FSHE 124

Course Description:

This course includes the study of international culinary terms, ingredient identification, and safety and sanitation practices as it pertains to pastry arts. Students will examine the science of dough products breads and breakfast baked goods while preparing a wide variety of breads made with various yeast starters so as to analyze the fine points of taste, texture, and appearance that distinguish fine breads. Students will expand their knowledge and their application of laminated dough products. Molding non-yeast dough will also be covered to allow students to create simple bread display pieces. Students will study techniques and presentations required to create a variety of layer cakes, tortes, tarts, tartlets, buttercreams and icings. A variety of international and popular American pies and baked custards desserts with emphasis on egg cookery will be covered. Student will learn the theory behind and develop techniques to produce a variety friandises (fancy cookies), using different makeup techniques and will learn how to evaluate the finished product and presentation.

Program Revisions:

In AY 2005-2006, we did submit a request to change the name of the Associate in Science degree, Food Service with a specialization in Patisserie and increase the number of credits required to obtain the degree at Kapi`olani Community College from 60-62 credits to 65 credits.

The current Food Service with a specialization in Patisserie program is a 60 – 62 credit program that was developed over fourteen years ago and needs to be modified to make it congruent with the changing needs of the industry. The major modifications or changes include:

- Changing the program name from the current Associate in Science degree, Food Service with a specialization in Patisserie to become an Associate in Science degree, Food Service with a specialization in Pastry Arts in order to more accurately capture the essence of the program.
- Changing the number of program credits that currently ranges from 60 – 62 to 65 credits. This is the net result of the addition of two courses - Intermediate Baking (5 credits) and Internship (3 credits), and the elimination of the elective course (3 – 5 credits). Departments offering the elective courses have been notified of the proposed elimination.
- Modification of the list of required courses in the curriculum
- Updating the program for accreditation review
- Modifying the program description
- Modifying the program competencies
- Modifying program prerequisites

These changes that have been proposed are driven by input and information from all our stakeholders including the Western Association of Schools and Colleges which is our college's accrediting body, the American Culinary Federation (ACF) which is the accrediting body for our program, our department's advisory subcommittee on Pastry Arts, the result of numerous student forums and especially the thoughts and concerns of our Pastry Arts faculty. These changes will allow this program and our department to achieve our goal of becoming a learning-outcome based, student-centered institution.

In AY 2005 – 2006, we did submit a request to change the name of the Certificate of Completion, Patisserie at Kapi`olani Community College and also to increase the number of credits required for the Certificate of Completion from 17 credits to 19 credits. The current Certificate of Completion, Patisserie is a 17- credit program that was developed over fourteen years ago and needs to be modified to make it congruent with the changing needs of the industry. The major modifications or changes include:

- Changing the program name from the current Certificate of Completion, Patisserie to become a Certificate of Completion, Pastry Arts in order to more accurately capture the essence of the program.
- Changing the number of program credits from 17 to 19 credits. This is the net result of the addition of one course - Intermediate Baking (5 credits) and the removal of one course – BUS 100 or PHIL 110 or MATH 24 (3 credits). Departments offering the elective courses have been notified of the proposed elimination. Email communications from the affected departments are listed in attachment 1 to this memorandum.
- Modification of the list of required courses in the curriculum
- Updating the program for accreditation review
- Modifying the program description
- Modifying the program competencies
- Modifying program prerequisites

These changes that have been proposed are driven by input and information from all our stakeholders including the Western Association of Schools and Colleges which is our college's accrediting body, the American Culinary Federation (ACF) which is the accrediting body for our program, our department's advisory subcommittee on Pastry Arts, the result of numerous student forums and especially the thoughts and concerns of our Pastry Arts faculty. These changes will allow this program and our department to achieve our goal of becoming a learning-outcome based, student-centered institution.

Part V. Analysis of Program

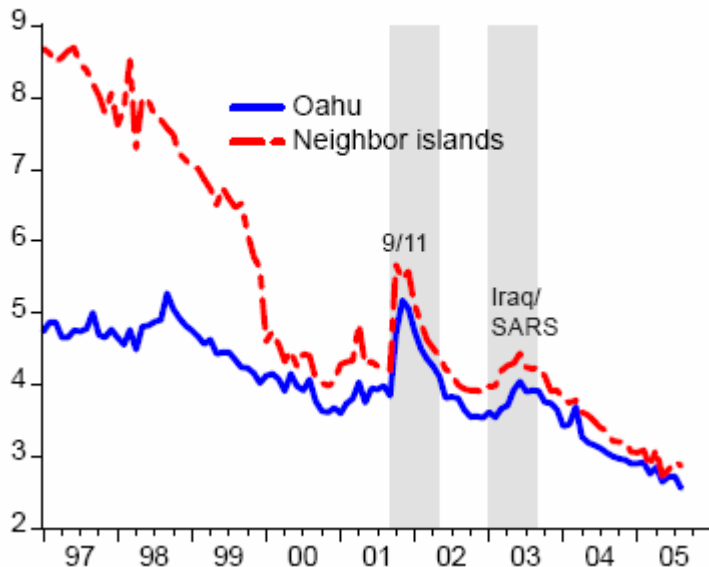
ANALYSIS

Culinary Arts

Demand

Student applications into the culinary arts program during the 2004-2005 period continues on a downward trend. The only optimistic note is that the slope of this decline is starting to flatten out from 19% two years prior to 17% a year ago and now down to 13%. This may indicate that this

Hawaii unemployment rates
(monthly, seasonally-adjusted, through August 2005)



downward trend that had begun in 1997 will bottom out soon. We suspect that the primary contributor to this decline in demand is the extremely low unemployment rate and that as long as it remains low, so will the number of applications.

In a study conducted by Betts and McFarland for the Economic Department of the University of California, San Diego, "...findings suggest that community college enrollments are very sensitive to unemployment and economic conditions. Moreover, the enrollment response is almost coincident with movements in unemployment."¹ Based upon

the data collected, they were able to "...conclude that the link between community college enrollment and the unemployment rate is significant both statistically and in terms of the absolute elasticity. Community college enrollments rise and fall remarkably in phase with the ups and downs of unemployment."

According to Paul Brewbaker, chief economist for the Bank of Hawaii, "...employment growth data for the latter months of the summer of 2005 have proven even stronger than registered earlier in the year."² In 2005, Hawaii had the lowest unemployment rate in the nation at 2.8% while the national average was 5.1%³

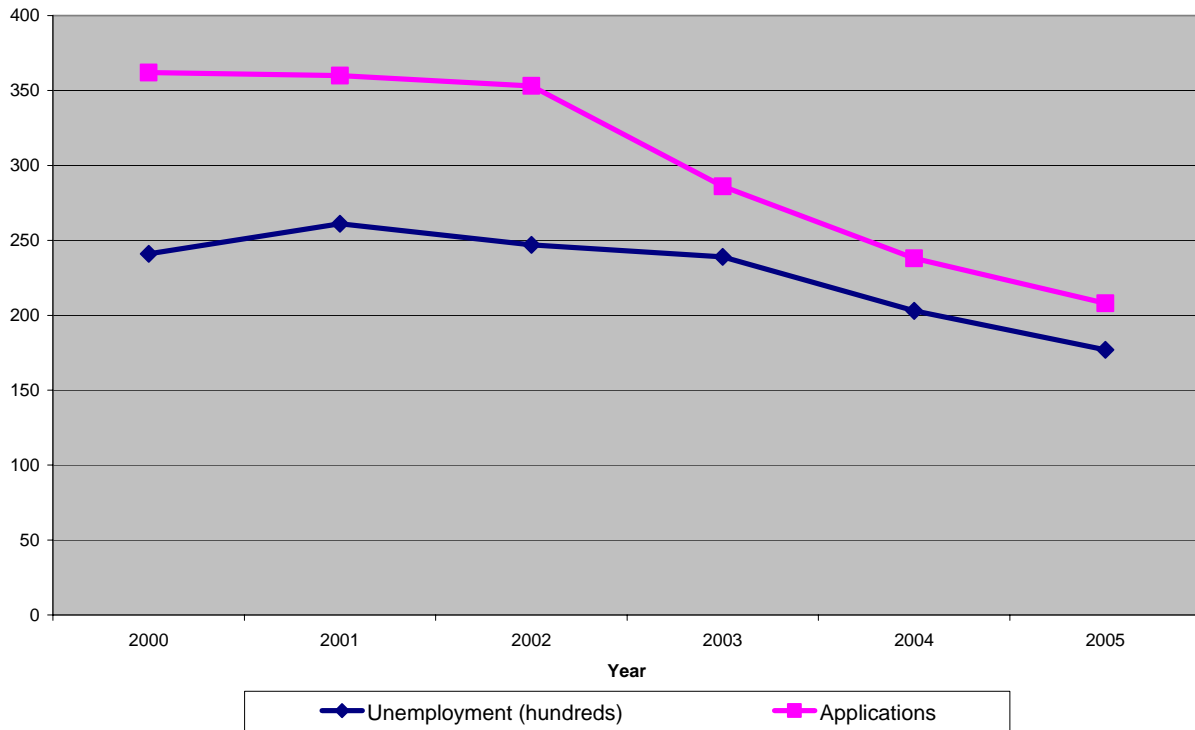
When you compare Hawaii's declining unemployment numbers with the number of applications into the Culinary Arts program, we see that there is a direct correlation between the two.

¹ Betts, Julian R., Laurel L. McFarland, 1995. "Safe Port in a Storm: The Impact of Labor Market Conditions on Community College Enrollments", *Journal of Human Resources*, Vol. 30, 1995.

² Brewbaker, Paul H., Oct. 19, 2005., *Hawaii Economic Trends*, Bank of Hawaii.

³ U.S. Department of Labor, Bureau of Labor Statistics, March 2, 2006. *Monthly Labor Review: The Editor's Pick*,

Number Unemployed and Culinary Applications



Tasked by the college with the mission of preparing students to meet rigorous employment and career standards by offering 21st century career programs, the decline in unemployment has hit this program extremely hard as the demand from the industry for workers of any skill level has attracted many of our potential students to enter the job market rather than seek professional training through higher education. Many restaurants have adopted the “any warm-body” concept of hiring employees, especially in the light of competition from a booming construction industry willing to pay top-dollar and going after the same market segments. According to economist Brewbaker, who was quoted in a Honolulu Star Bulletin article titled, “Help Wanted: Trouble Hiring in Hawaii”, that discussed the difficulty Hawaii’s businesses are facing in attracting employees during a tight labor market, “It’s made even harder by the fact that qualified workers have so many other opportunities to consider.”*

Faced with this disturbing situation, we have made the marketing of our Culinary/Pastry Arts program to potential students as the number one priority within our department. To properly market our program, we had to first determine if the current product was actually meeting the needs of our customers. Based upon student input during our semiannual “Pizza & Pepsi” forums and industry input by polling members of our local culinary association, we were able to determine that the product, though academically sound, could be revised to become more attractive to market segments that we may have overlooked. We decided to institute action steps to address the needs of these various market segments:

1. Those who are already employed in a full-time day job are often unwilling to quit their job to enroll in school without first finding out if this is a career change that they wish to make.
 - a. To address their needs we instituted a PM Fundamentals of Cooking class, that begins after 4 pm for those who can not take an AM class.

2. Those who may be very skilled hands-on learners but have not developed the academic skills required to be complete an AS degree and those who can not afford to come to school because they need to hold down a full-time job.
 - a. To address the needs of both the hands-on and the financially challenged students, we have established an American Culinary Federation approved Apprenticeship program that features an “Earn as You Learn” concept for the more hands-on learners.

We had also embarked upon a major marketing campaign, aimed at providing high quality program information to our major feeder schools within both the public and private sector. Included in this marketing campaign has been creation of: a Marketing DVD that features a made-for-TV commercial of our program and TV clips featuring a narrated tour of our courses; professionally-produced marketing collateral such as calendars and brochures; and a marketing campaign using local media. Funds expended have all been from external sources.

We have revitalized the Hawaii State Student Culinary Expo and held Honolulu’s first American Culinary Federation Student Competition on our campus to draw the attention of potential students to our program, and also to excite future students about pursuing a culinary career. We have been successful in obtaining corporate sponsorship for both events, allowed us to externally fund our marketing efforts.

In our attempt to develop better relationships with our feeder high school programs, we have:

1. Underwritten the cost of meals for any high school culinary program’s campus visit.
2. Hosted the annual Statewide FCCLA high school culinary competition.
3. Mailed the marketing DVD and other collateral to all Hawaii high schools.
4. Invited all high schools to participate free of charge in our annual Culinary Expo.

We have ramped up our efforts to attract the one market that has a serious potential to rapidly increase in demand for education, that being the military component. With the military offering ever increasing educational benefits to Active Duty, Reserve and National Guard Servicemen & women, this group will be eager to utilize their benefits in the very near future. In order to attract them, we have recently hired a new full time Military Instructor/Coordinator and a Military Chef Instructor. In order to increase our capability to attract military and governmental contracts, we have joined the Defense Training and Education College Consortium (DTECC), which consists of five community colleges situated near major military installations throughout the United States who collaborate to reply to Military/Governmental RFPs.

Although we had anticipated that these plans would positively impact demand, it may have served to only slow down the decline. The unanswered question is what would enrollment be today if we had not taken any of these action steps?

**Note: Although the decrease in unemployment should have resulted in an increased demand for our completers, thus positively impacting our Postsecondary Placement (3P1) numbers, there was actually a decrease. One explanation for this could be that according to the “An Explanation of Perkins Core Indicators” issued by our Office of Institutional Research, this measure looks at our 2000-2001 completers and not at the 2004 completers, and this would reflect the economy that had been severely impacted by the events of 9/11.*

Effectiveness

While we are satisfied with the 3.08 employer satisfaction rating and the 3.17 score for student satisfaction, we know that we can do better. We have theorized that students may be disappointed in their educational experience versus what they thought they would be experiencing. In order for students to make informed choices as to their educational pathway, they must first have realistic goals and objectives based upon a true assessment of their skill levels. The department is committed to supporting the establishment of a computerized pre-admission skills inventory for all students to help them to identify the educational goals that are best suited for. By becoming proactive instead of reactive to the needs of students, we will be able to positively impact our effectiveness rates in both student satisfaction and graduation rates. To gather higher quality user input, we have already instituted a format for obtaining student feedback through a regularly scheduled student forum that allows students to communicate directly with the chairperson. Though the original departmental survey was done on a 5 point rating system, it has been converting into a four point system for the sake of consistency. A point that must be noted is that the reason for enrollment into the program most mentioned was the reputation of the program. We noted that the Leaver Graduation numbers were incorrectly recorded at 111 and when we revised it to include the number of certificates of completion that have been awarded, we found that the rate had dropped to 39.73% from a high of 53.7% last year. After an investigation, it was determined that for the last two years, we had been processing a backlog of certificates that had never been awarded to our students. Now that we have caught up, the current number seems to be a more accurate reflection of our actual situation.

We are also pleased that the persistence rate of our majors has been steadily improving from 55% three years ago up to 68% this past year. When viewed together with last year's upward turn in the number of new majors, it would seem indicative of a program that is increasing its effectiveness.

Efficiency

We were able to increase our efficiency by reducing the number of low-enrolled classes and increasing the number of Nutrition classes that have a higher student-teacher ratio than our culinary lab classes. Due to accreditation requirements, the program had created a lecture-lab Introduction to Culinary Arts/Career Development class that also has a higher student-teacher ratio.

We have finally been able to clear the books of instructors that had been furloughed but were still being paid out on through the department.

Appendix Data Elements

FOOD SERVICE
Demand

Enrollment/Admission

Number of Majors -- The number of students who are accepted as majors into the program during Fall 2005 as of March 2006.

Source: SCT Datamart

Number of New Majors -- The number of new students who are registered for 1 semester hour or more and who have been accepted into the program during Fall 2005 plus the number of continuing students who are registered for 1 semester hour or more and who change their major to this one as of March 2006.

Source: SCT Datamart

Number of Applicants -- The number of new students selecting this major on the common application form plus the number of continuing students who change their major to this one for consideration for Fall 2005 as of March 2006.

Source: SCT Datamart

Number of FTE Majors -- The number of the total student semester hours in this program during Fall 2005 as of March 2006 divided by 12.

Source: SCT Datamart

Number of FTE Faculty -- The number of course-semester hours taught in this program divided by 15 during Fall 2005 as of March 2006.

Source: SCT Datamart

Number of Student Semester Hours (SSH) -- The sum of semester hours taken by all students who are majors of this program in all regular credit courses Fall 2005 as of March 2006.

Source: SCT Datamart

Employment Opportunities

Current Positions -- The number of current statewide jobs in the category for which students in this program are being trained.

Source: State of HI Employment Outlook for Industries & Occupations, 1996 - 2006

Projected Positions -- The estimated number of statewide jobs in 2006 in the category for which students are being trained.

Source: State of HI Employment Outlook for Industries & Occupations, 1996 - 2006

Average Openings Per Year -- The estimated number of job openings in this category per year. The number of openings includes both those resulting from turnover in existing jobs and from expansion of the industry.

Source: State of HI Employment Outlook for Industries & Occupations, 1996 – 2006

Effectiveness

Satisfaction Surveys

Students: On a scale of 1 to 4 with 4 being the highest, the mean for the issue of overall satisfaction with the program, based on a survey conducted by the Office of Planning & Institutional Research and the Career Personal Development Unit.

Source: 2001 Graduate-Student Survey

Employer: On a scale of 1 to 4 with 4 being the highest on the item dealing with overall performance.

Source: Department Surveys

Program

Leaver Graduation Rate -- The number of students who graduated from the program in Fall 2004, Spring 2005, and Summer 2005 divided by the number of students who were majors in this program during the same time.

Source: SCT Datamart

Number of Degrees/Certificates Awarded -- The total number of degrees and certificates awarded to students of this program during the academic year 2003-2004.

Source: Prior data: SCT Datamart

Current data: MAPS Reports

Efficiency

FTE Students per FTE Faculty -- The number of the total student-semester hours (numerator) divided by 12 as of March 2006 over the number of course-semester hours offered in the program (denominator) divided by 15 as of March 2006.

Source: FTE Students: SCT Datamart

FTE Faculty: SCT Datamart

Average Class Size -- The sum of the number of students registered in each program course divided by the number of courses offered in the program as of March 2006.

Source: SCT Datamart

Occupancy Rate -- The total number of students registered in each program course divided by the sum of the number of openings for these courses as of March 2006. For these indicators, the upper and lower cutoff points are set at 80% and 65% universally.

Source: SCT Datamart