The cooking suite sits under an energy-efficient hood. The labs also feature versatile refrigerated drawers.

Six culinary labs, a restaurant/bar, a bakery café and a full catering operation for the conference center give culinary students an opportunity to learn their trade on state-of-the-art equipment situated on two lower floors and in a penthouse suite.

CULINARY AND CONFERENCE CENTER at Ivy Tech Community College in Indianapolis, Ind.

By Donna Boss, Contributing Editor

For 27 years after its founding, Ivy Tech Community College's culinary program had earned respect and a well-deserved reputation. Then, in 2003, Jeffrey Bricker, CEC, CCE, AAC, an alum of the program, part-time program instructor and former catering company owner, took on the program chair position. Working with an advisory council to develop a strategic plan, Bricker realized an enormous need for more culinary and hospitality staff in Indianapolis to support the new Lucas Oil Stadium, home to the Indianapolis Colts football team, and the city's convention center, which doubled in size in 2010.

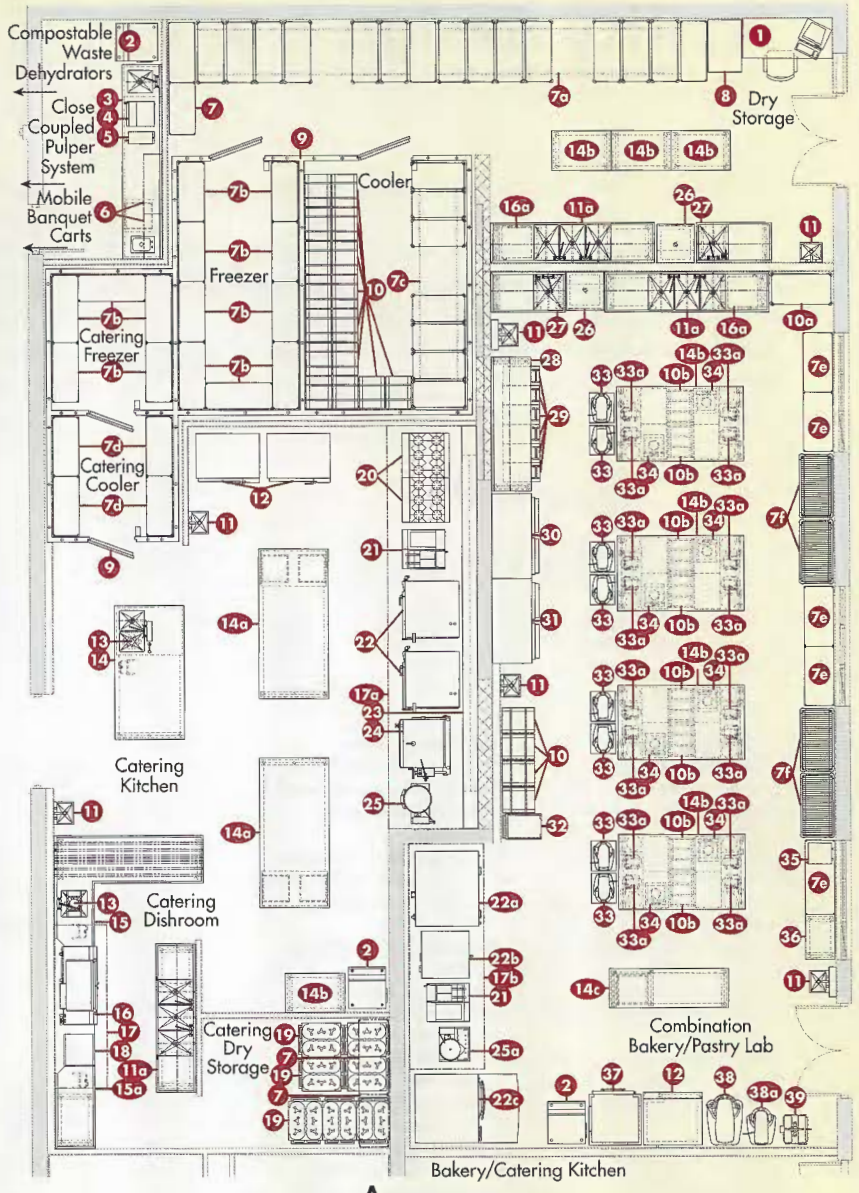
"A significant culinary program expansion was needed," he says. "We were situated in an old campus building, with 220 students and operating out of 2 dated kitchens. We were landlocked and had no room to grow." So the school began exploring its options, continuing for eight years to research five different program venues and business plans. Meanwhile, an additional 380 students joined the program, bringing

The student-run Courses Bakery and Café offers comfort in an open space and features fresh baked goods, panini sandwiches, gourmet coffee drinks and stone-hearth pizza.

Courses Bakery and Café Floorplan

Equipment Key

1. Office equipment
2. Ice maker w/ bin
2a. Undercounter ice maker
3. Banquet prep counter
4. Airpot coffee brewer
5. Iced tea brewer
6. S/s wall cabinet
7. Dry storage shelving unit
7a. High-density dry storage shelving
7b. Freezer shelving unit
7c. High-density cooler shelving
7d. Cooler shelving unit
7e. Half-height storage shelf unit
7f. Utensil/pot and pan cage shelving
8. #10 can rack
9. Full-size sheet pan rack
10a. Pot and pan drying rack
10b. Half-size sheet pan rack
11. Hand sink
11a. Three-compartment sink
12. Blast chiller/freezer
13. Disposer
14. Veg. prep worktable
14a. Chef's prep worktable
14b. Mobile worktable
14c. Professor worktable counter
14d. Kitchen prep back counter
14e. Student worktable counter
14f. Coffee shop serving counter
14g. Coffee shop beverage counter
14h. Hot food prep counter
15. Soiled dishtable
15a. Clean dishtable
16. Dishmachine w/ booster heater
16a. Undercounter dishmachine
16b. Ventless door-type dishmachine
17. Catering kitchen dish hood
17a. Catering kitchen exhaust hood
17b. Bakery/pastry exhaust hood
17c. Bakery café exhaust hood
18. Dishmachine blower dryer
19. Adjustable dish dolly cart
20. 36-in. 6-burner range
20a. 36-in. range/24-in. griddle
21. Fryer w/ dump station
22. Roll-in combi oven
22a. Four-level deck oven w/ stand
22b. Convection oven
22c. Rotating rack oven
22d. Stone hearth brick oven
22e. Convention oven/proofer
22f. Rapid cook countertop unit
23. Utility distribution system
24. 40-gal. tilt skillet
25. 20-gal. tilt kettle
25a. 12-gal. tilt kettle w/ stand
26. Enclosed janitorial cabinet
27. Veg. prep counter
28. Bakery scaling counter
29. Ingredient bin
30. Roll-in refrigerator
30a. Pizza prep refrigerator
30b. Undercounter refrigerator
30c. Worktop refrigerator
30d. Sandwich prep refrigerator
31. Roll-in freezer
32. Sheet pan dolly cart
33. 20-qt. mixer w/ stand
33a. 8-qt. countertop mixer
34. Countertop induction cooker
35. Microwave oven
36. Ice cream machine
37. Retarder/proofer
38. 60-qt. floor mixer
38a. 30-qt floor mixer
39. Dough divider
40. Bottom-mount hot food well
41. Espresso coffee machine
42. Countertop beverage blender
43. Gelato display case
43a. Bakery display case
44. POS system
45. Countertop waffle maker
46. Countertop panini grill
47. Coffee shop beverage dispenser



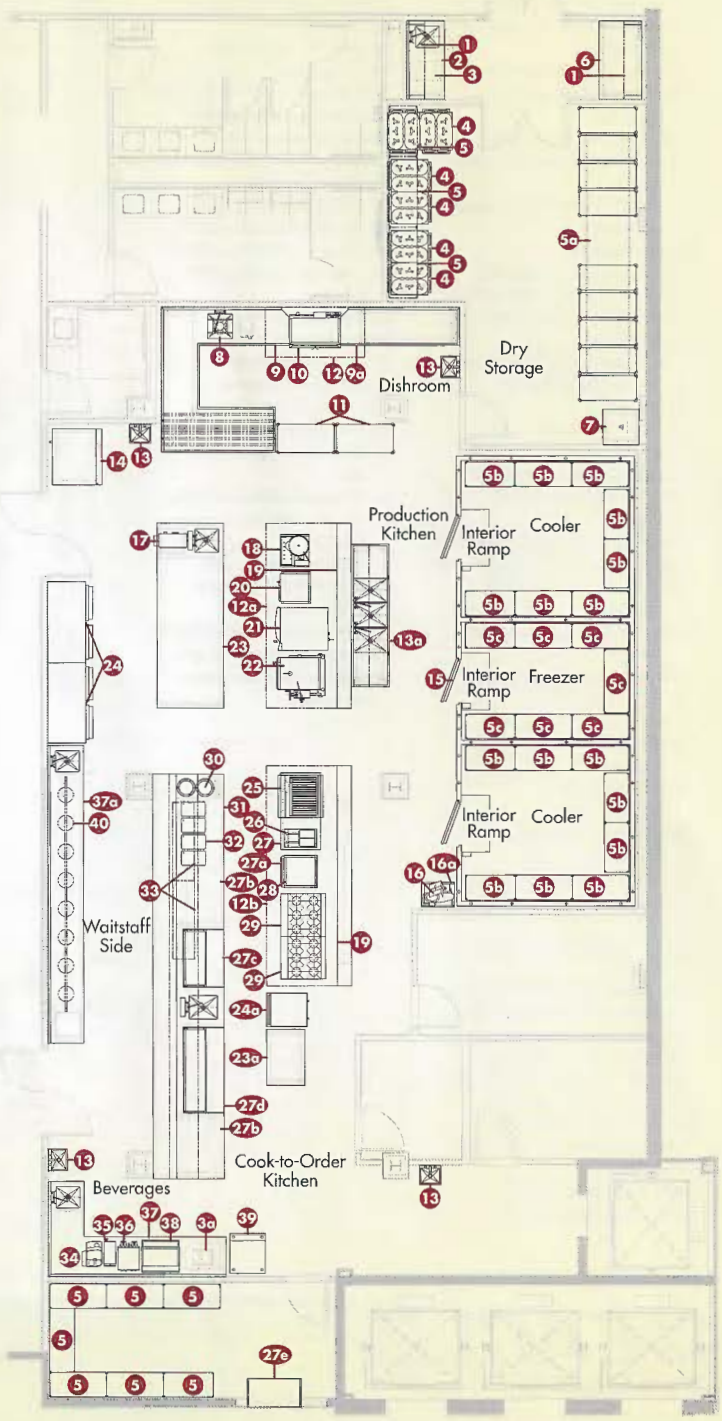
enrollment to 600. Bricker and the advisory council were understandably frustrated.

In December 2010, the Eli Lilly and Company Foundation, the tax-exempt private foundation headquartered in Indianapolis and established in 1968 by the global pharmaceutical giant, offered a $23 million grant to buy and renovate a 13-story building adjacent to campus.

"The foundation was interested in the revitalization of this area, which is close to the world's largest children's museum," Bricker says. "They didn't want the area falling into disrepair and saw this as an opportunity to develop an educational corridor around the museum. They asked the college to identify its biggest need, which was culinary and a corporate college for customized noncredit training."

Courses Restaurant Floorplan

1. S/s wall cabinets
2. Catering sink counter
3. Undercounter ice maker
3a. Ice maker w/ managing system
4. Adjustable dish dolly cart
5. Dry storage shelving unit
5a. High-density dry storage shelving
5b. Cooler shelving unit
5c. Freezer shelving unit
6. Catering work counter
7. Enclosed janitorial cabinet
8. Disposer
9. Soiled dishtable
9a. Clean dishtable
10. Dishmachine w/ booster heater
11. Pot and pan drying rack
12. Restaurant kitchen dish hood
12a. Production cooking exhaust hood
12b. Made-to-order exhaust hood
13. Hand sink
13a. Compartment sink
14. Blast chiller/freezer
15. Walk-in cooler/freezer
16. Food slicer
16a. Food slicer stand
17. Hot water dispenser
18. 12-gal. tilt kettle w/ stand
19. Utility distribution system
20. Stacked steamer w/ stand
21. Combi oven w/ stand
22. 30-gal. tilt skillet
23. Chef-prep worktable
23a. Mobile worktable
24. Roll-in heated cabinet
24a. Mobile hot food cabinet
25. 36-in. under-fired charbroiler
26. Countertop fryer
27. Refrigerated chef base
27a. Undercounter refrigerator
27b. Refrigerated prep drawers
27c. Chef prep refrigeration
27d. Salad prep refrigeration
27e. Wine bottle display refrigeration
28. Rapid cook countertop oven
29. 36-in. 6-burner range
30. Drop-in plate warmers
31. Chef's table
32. Bottom-mount hot food well
33. Overshelf food warmer
34. Espresso coffee machine
35. Iced tea brewer
36. Airpot coffee brewer
37. Beverage back counter w/ sink
37a. Waitstaff back counter w/ sink
38. Eight-head beverage dispenser
39. Ice storage bin
40. Overhead pull-down heat lamps



Working with administrators, faculty, Schmidt Associates and Reitano Design (formerly Foodservice Solution Group), Bricker led the project team to gut an existing Stouffer's Hotel that had closed in the 1980s and build a contemporary facility that includes the school's central region culinary program with seven culinary labs, a restaurant/bar, a bakery café and full catering operation for the conference center, and a corporate college.

The culinary college currently enrolls 850 students, and enrollment is expected to grow to 1,500 students. "As a community college we have a broad student profile of all ages and educational backgrounds," Bricker says. "The average age is 26. Nearly 70 percent of the students qualify for Pell grants, and a high percentage are first-generation college students. Because this is part of a statewide community college system, the legislature provides funding and caps tuition. A student can get an associate's degree for less than $10,000, about one-fifth the cost of proprietary schools." Bricker adds that the new facility allows scheduling that gives students flexibility to work, attend school, manage their nonschool lives and move through the program in 18 months.

"They now have a world-class facility supporting a world-class program," Reitano says. "An interactive process brought Chef Bricker and his staff into the design process. Their experience and input were invaluable in getting the spaces right and getting the project done on time."

Built in the 1960s, the Stouffer's Hotel was a hot spot through the 1970s, registering guests such as Elvis Presley. After the hotel shut its doors in the early 1980s, a faith-based organization moved in to occupy the facility.

"We had to work with a structured space and yet gut the entire building except for historical elements on the 13th floor in order to bring the structure up to code," Bricker says. "We had to do asbestos abatement and replace all the windows, electrical wiring, HVAC and plumbing."

"This building had very low floor-to-floor heights," says Kevin Shelley, project lead at Schmidt Architects, Indianapolis. "We literally raised the roof of a portion of the building four feet, which gave us space to run the systems to support the culinary labs, including exhaust hoods. It was the most cost-effective option." The second floor, to which Shelley refers, is an appendage to the 13-story tower on its north side.

"The key for us was the building's entry lobby," Shelley says. "The hotel tower had 8 feet, 8 inches, floor-to-floor, leaving less than 8 feet of clearance for program space and systems. We created an atrium that never existed to help

DESIGN CAPSULE

- **Ownership:** Ivy Tech Community College
- **Opened:** September 2012
- **Project Scope:** The facility, called Ivy Tech's Corporate College and Culinary Center, is a repurposed Stouffer's Hotel that closed in the 1980s. It now houses Ivy Tech's central region culinary program; the corporate college, designed to work with Indiana corporations to prepare a curriculum and administer any program at this facility, as well as to help train workers for specific skills that corporate citizens need or want; and the multiroom conference center (Sodexo runs the in-house catering operation; the catering kitchen is designed to serve up to 1,200 people in a served-meal banquet setting).
- **Facilities:** The first floor contains Courses Bakery and Café, a retail bakery operation; meat fabrication lab; bakery and breads lab; inventory center; waste reduction system; and catering operation for the conference center. The second floor features the culinary labs (high-end cooking suites); chocolate room; advanced bakery lab; and garde manger, including a humidity-controlled walk-in for drying meats. On the 13th floor are Courses (a full restaurant and bar) and the President's Conference Room. Classrooms and offices are on the third and fourth floors.
- **Students Enrolled in Culinary Program, in Hospitality Management:** 850 (expected to grow to 1,500)
- **Size of Building:** 17,650 sq. ft.
- **Size of Facilities:** Main walk-in cooler/freezer and dry storage, 1,000 sq. ft.; catering kitchen and prep spaces, 2,150 sq. ft.; meat fabrication lab, 2,100 sq. ft.; bakery and breads lab, 1,500 sq. ft.; combination bakery/pastry lab, 1,500 sq. ft.; Courses Bakery and Café, a bakery café/kitchen lab, 1,200 sq. ft.; advanced pastry lab and chocolate room, 1,400 sq. ft.; basic foods culinary lab, 1,400 sq. ft.; garde manger culinary lab, 2,000 sq. ft.; Courses, a penthouse restaurant kitchen and bar, 2,000 sq. ft.
- **Seats:** Courses restaurant, 130, and bar, 30; Courses Bakery and Café, 45. The conference room can accommodate 500 seats; and the second-floor ballroom accommodates 250 seats.
- **Average Check:** Courses restaurant, $12 lunch and $35 dinner; Courses Bakery and Café, $6
- **Total Annual Sales:** Courses restaurant, $250,000 (projected); Courses Bakery and Café, $100,000 (projected)
- **Daily Transactions:** Courses restaurant, 45-60 covers at lunch and 60-80 covers at dinner; Courses Bakery and Café, 75-100
- **Hours:** Courses restaurant, Monday and Tuesday 11 a.m. to 1:30 p.m. for lunch and Wednesday and Thursday 6 p.m. to 8 p.m. for dinner; Courses Bakery and Café, 7:30 a.m. to 9:30 a.m. for breakfast and 11 a.m. to 1:30 p.m. for lunch
- **Staff:** 7 full-time and 35 part-time instructors; 6 administrative staff
- **Total Facility Cost:** $34 million, including $7 million for culinary facilities
- **Equipment Investment:** $3.4 million (with educational discounts); $250,000 for smallwares
- **Website:** www.ivytech.edu/Indianapolis and www.ivytech.edu/courses

The bakery lab features tables with wood-top baking surfaces and suspended monitors so students can see instructors at work. Each table contains the appropriate setup for each student, including half-size racks.

make this an open space." Grand stairs lead to the ballroom and classrooms and connect to the conference room.

Also in the building, the construction team had to clear space in an area that was originally the hotel's swimming pool. Thick concrete was removed to build culinary laboratories.

Early on in the design process, the owner and the project team set a goal for the design to meet the requirements for LEED silver certification, which influenced the selection of the heating and cooling systems; high-efficiency, low-CFM exhaust hoods; foodservice equipment, including dishwashing and disposal systems; and windows. In the restaurant, designers selected carpeting with high amounts of recycled content, porcelain tile floors and lay-in acoustic ceilings.

Lighting includes fluorescents throughout the labs. In the restaurant, lighting includes both fluorescents and incandescents. Also contributing to energy efficiency is an advanced refrigeration system designed with 100 percent redundancy, intelligence for defrost-as-needed only, an alarm and HACCP reporting function, and a smaller footprint than traditional rack systems.

"There is also the additional benefit of removing compressors from each of the lab spaces," Reitano says. "The instructional team struggled with teaching over the noise of multiple compressors in each lab. With this refrigeration system we eliminated that issue and reduced the heat load within the building."

Another significant challenge was the tight design schedule and subsequent construction timeline. "Design of the project began in March 2011 and was completed in September of the same year," says Scott Reitano, principal, Reitano Design Group, the project's foodservice design consultant. "The project was bid in

The meat fab lab offers clear sight lines throughout. The openness and use of monitors support students' ability to learn. Staff program versatile refrigerated tables with drawers for refrigeration, shock freezing or blast chilling, which allows flexibility in the curriculum. The lab also contains combi ovens and a blast chiller.

KEY PLAYERS

- **Owner:** Ivy Tech Community College
- **Chancellor:** Kathy Lee
- **President:** Thomas Snyder
- **Program Chair:** Jeffery Alan Bricker, CEC, CCE, AAC
- **Facility Planning Committee:** Lauri Griffin, CEC, associate professor; Thom England, CEC, CCE, culinary instructor; Paul Vida, CEPC, CCE, baking and pastry arts instructor (also lead for bakery); and Keith Parish, MBA, hospitality management faculty manager and runs the front of the house
- **Architect and Interior Design:** Schmidt Architects, Indianapolis; Kevin Shelley, AIA, LEED AP, principal and project lead
- **Executive Chef:** Allen Edwards
- **Foodservice Design Consultant:** Reitano Design Group, formerly Foodservice Solutions Group; Scott Reitano, principal in charge; Jim Kessenich, project designer
- **General Contractor:** Shiel Sexton, Indianapolis
- **Equipment Dealer:** Stafford-Smith, Indianapolis office; Adam Schut, project manager; John Russell, lead installer; and Norman Marshall, project closeout

late 2011, and construction began in February 2012. Classes started on August 20, 2012.

"We focused a significant amount of our attention on this project over the 18-month design and construction period," Reitano explains. "We actually treated it like multiple projects in order to meet the various deadlines. The team worked closely with the general contractor, Shiel Sexton, and the kitchen equipment contractor, Stafford-Smith, to make adjustments until the very last second prior to opening."

The 17,650-square-foot building houses foodservice-related facilities on 3 floors. The first floor contains the loading dock and receiving area; main walk-in cooler/freezer

Courses restaurant on the 13th floor seats 130 guests. Natural light complements incandescent lighting to brighten the room.

and dry storage; Courses Bakery and Café, a retail bakery operation; bakery and breads lab; meat fabrication lab; waste reduction system; and catering operation for the conference center. The second floor contains two advanced culinary labs with high-end cooking suites, sous vide stations and a chocolate room; advanced bakery lab; and garde manger, including a humidity-controlled walk-in for drying meats. The 13th floor penthouse contains Courses – a full restaurant and bar – and the President's Conference Room.

"The equipment and layout was driven by our curriculum and course objectives," Bricker says.

Bricker and Reitano investigated equipment at two industry trade shows and toured other culinary schools. "We wanted students to experience current technology so they'll be prepared to use it when they take jobs in the industry," Bricker says.

"We wanted to give them equipment they'd see in the marketplace," Reitano says. "The layouts don't exactly mimic what you'll find in a commercial kitchen. We adjusted the distance between cooking islands and counters to accommodate classes of up to 16 students.

"There are also different, yet similar, items on the cooking suites so students can experience various cooking methods," Reitano continues. "For example, both induction burners and gas burners are available on each suite. Our overarching goal was to create an open learning environment for the students. The use of windows, the placement of the equipment, and even the use of 55-inch monitors suspended from the ceiling helped us achieve that goal."

The flow of food from delivery to the labs and penthouse

is similar to many dining establishments with its ground-floor loading dock and receiving area. When food and other items arrive, staff place them into a secure central storage area, complete with a walk-in cooler, walk-in freezer and dry goods storage area. The walk-in refrigeration units and dry goods storage area contain high-density shelving to allow for approximately 40 percent more storage in the space and easy access for students. Each culinary class requisitions food and supplies from the central commissary. Student managers pick up the items daily and transport them to their production areas for each class.

"This process is repeated after each class, with students transporting food waste to a central waste reduction site on the first floor," Reitano says. Ivy Tech uses pulpers modified for batch operation and dehydrators to substantially reduce the food waste the facility generates. Ivy Tech has a goal of zero net waste for the facility.

"Waste is fed into a dehydrator and comes out as a soil amendment, which is rich in nitrates and great for growing food," Reitano says. "As the school develops its farm-to-fork program, the soil amendment will be used in the school's garden."

Also on the first floor, in the meat fabrication lab, students learn their craft on refrigerated tables specifically designed for this task. By using tables with refrigerated tops and cutting boards, Ivy Tech has avoided the high costs of chilling an entire temperature-controlled room. The refrigerated tables are also equipped with drawers that staff can program for refrigeration, shock freezing or blast chilling. This allows for flexibility in the curriculum.

Three bakery labs, one is on the second floor, provide equipment for students to learn about everything from baking bread to creating pastries, including classical cakes and tortes, cookies and high-end tortes. The retail bakery area, Courses Bakery and Café, features a prep table and hearth oven for preparing pizza and artisan-style breads. Staff also use a panini press for sandwiches and a steam-jacketed kettle for

Top: In the chocolate room, marble tops are the preferred work surface. Beyond this room, the garde manger walk-in cooler contains hanging, aging meats.

Bottom: The use of combi ovens in concert with blast chillers allows for advance food prep and production and insures that staff can serve hot, quality food on time at each banquet. The banqueting system also allows the operator to control labor more effectively.

ABOUT THE PLAYERS

Jeffery Alan Bricker, CEC, CCE, AAC

A 30-year career in foodservice includes working in the quick-service segment, training at Ivy Tech, and operating his own catering company, Creative Cuisine, in Greenwood, Ind., for 15 years.

While running his catering business, Bricker taught classes in sanitation, catering administration, menu design and food and beverage cost control. In 2002, he returned to Ivy Tech to teach full time and in 2003 accepted the position as program chair. He still teaches when he's not involved in more administrative responsibilities.

Chef Bricker was recently inducted into the American Academy of Chefs, a national honor society of the American Culinary Federation.

Scott Reitano

Reitano is a veteran of the foodservice industry, with more than

25 years of experience, including a strong manufacturers' rep background. He worked for Hobart Corp. as a district manager after graduating from Miami University in Ohio. He later joined SESCO as a manufacturers' rep, becoming senior partner in 1996 and president in 2002. Ready to pursue new challenges, Reitano purchased Foodservice Solution Group in 2004 and recently changed the name to Reitano Design Group. He continues to serve as principal.

Kevin Shelley, AIA, LEED AP

Shelley is a principal of Schmidt Associates, a full-service

strategy, design and construction firm located in downtown Indianapolis, and a project manager in the Higher Education Studio. He works with a variety of institutions, including Ball State University, Indiana University and Ivy Tech Community College of Indiana, on design and planning issues. Shelley has a bachelor's degree in architecture and environmental design from Ball State University and attends seminars throughout the year to stay current on today's trends in education.

soups. Some finished baked goods are placed in a display case and sold to retail customers who include students, faculty, patrons of the corporate college and community members. The customers can take out menu items or eat on-site in a 45-seat dining area.

The back-of-the-house area for Courses Bakery and Café serves as a learning lab for the retail class and contains a large amount of prep space, an eight-burner range, a steam table for holding hot foods and a bread slicer.

The first floor is also home to a catering kitchen that is currently operated by Sodexo. The catering operation supports banquets, conferences, training classes and other special events in the conference center. Larger events take place in a ballroom that seats up to 250 and can be divided into smaller rooms.

One of Bricker's favorite areas is the enclosed mop closet, which is located in each lab. Constructed of stainless steel, this cabinet is self-contained and vented. When staff open the doors, they can access a complete mop sink setup, including a shelf for chemicals. "This is great because you don't notice that this is a mop closet when you're in the kitchen," Bricker says. "The health department also likes this because everything is contained."

On the second floor, the labs contain cooking suites that enable students to learn more advanced preparation. They also learn about sous vide preparation, which is finding its way into more high-end restaurants than ever before.

Courses Restaurant

In the 13th floor penthouse suite, Courses restaurant kitchen occupies 2,000 square feet. A dining room seats 130 guests while the President's Conference Room seats 50. In the restaurant, Bricker says, "the most important design feature is the windows allowing a view of downtown Indianapolis and the historical components that were saved such as the original fireplace, woodwork, beveled glass that came from the Van Camp mansion, and furniture."

Other glass windows along one corridor leading from the dining room to the President's Conference Room and restrooms allow restaurant guests and program visitors to see activity in the kitchen. "Viewing the kitchen was a very important criteria for design," Reitano says. "There weren't a lot of options given the configuration of the space, so we are very pleased that a high-traffic hallway was worked into the layout right outside the kitchen."

The penthouse-level restaurant, bar and catering operation are all self-sufficient, with their own refrigerated and dry storage areas in place. Deliveries arrive directly in the kitchen space via a freight elevator from the first floor; staff members, including instructors and students, place items in their appropriate places.

An area designated for volume preparation includes an 8-quart mixer for staff to make compound butters and a

The aisles in Courses restaurant kitchen are wider than in many restaurant kitchens to accommodate the movement of many students.

20-quart mixer for whipping up garlic mashed potatoes. Staff also use a combi oven for making dishes such as braised beef short ribs and roasting bones for stocks. A tilt skillet braises meats, and the steam-jacketed kettles also heat soups and stocks.

Staff transmit guests' orders via a POS system that has monitors at each of four stations in the kitchen. The first station is the pantry for cold appetizers, salads and desserts. Staff use a prep stand and refrigerated top and cutting board to prepare cold appetizers, salads and desserts. The programmable drawers at this station allow for refrigeration, freezing and blast chilling.

At the sauté station, staff use a 12-burner range with a convection oven below to prepare dishes with chicken, shrimp, scallops and other seafood. Refrigerated drawers also support production here.

At the grill station, staff use a charbroiler with a refrigerated base for marinated pork on skewers for the international menu, steak Diane and fish dishes.

When dishes are complete, staff pass them to the expediting station, containing a heated shelf and heat lamps, where they sit briefly until service staff pick them up and deliver them to guests.

Staff collect dirty dishes from the dining room and bring them into a dishroom before scraping plates and taking the food waste downstairs to the pulper in the dock area for waste-reduction processing. This is the same process staff use in all the kitchens. All dishes are placed in on-site warewashers in each lab.

Within a short time, instructors and students have adjusted comfortably to the new facility and equipment. Just as students here learn to use equipment found in restaurants and other industry facilities, they are surely discovering new applications for the technology and will eventually take this into the industry. This symbiotic relationship is what fuels the foodservice world and keeps it vibrant. **FE&S**