

A public safety officer at Wesleyan University once lamented, "Kids here spend all week getting smart and all weekend getting stupid."

He was referring to those weekend keg parties. Drinking weekends after a hard week of studying has been an institution on college campuses, but one group of students has found a way to integrate it into the curriculum.

Chemistry 412, a student-run tutorial worth one credit offered this spring, teaches what students say is one of the most practical skills they have learned in college — home-brewing.

"Some people laugh at it and say, `You're getting credit for making beer?'" said Chris Asher, 22, a senior from Newton, Mass., who teaches the class in the kitchen of his apartment in Middletown. "But there's a lot of chemistry involved that people don't realize. I think this kind of thing might change people's attitudes toward beer drinking."

Asher's pantry is heaped with sacks of malted grain, sanitized plastic barrels and empty commercial beer bottles, and there's always a pot of barley cooking in the oven. Asher, an American studies major, has been brewing since his housemate Toby Koffman introduced him to it two years ago in the basement of Chi Psi, Koffman's fraternity.

But teaching the class has made Asher take a more methodical approach to his hobby. Since January, the dozen students in the class have mastered the science involved in producing pale ales, stouts and porters.

Students make the beer by combining a syrup made from malted grain with hops and water over a high heat. The level of heat and the length of time ingredients are in the pot determine the percentage of alpha acids, which determine the bitterness of the brew, Asher says. The mix is poured into a sanitized container with flavorings and yeast, and left to ferment for eight to 14 days, until the yeast turns the sugars into alcohol and carbon dioxide. Students stop the process when a hydrometer, which shows the specific gravity of the brew, indicates that all fermentable sugars have been metabolized by the yeast. Sugar is added to the bottle to carbonate the beer, and it is aged for at least 10 more days before drinking.

Home-brewing wasn't legal until 1978 because a misprint in the Federal Register neglected to allow it again after Prohibition. Small breweries were wiped out, and the recovery is only now gaining momentum.

Asher said all of the registered students in the class are at least 21. Marshall Johnston, 20, is auditing the class because he could not legally taste his own product — part of the course requirement.

For their final project, due this week, students are experimenting with formulas and flavorings. Some are going wild, using everything from freshly grated ginger root to starfruit to chocolate and coffee — though they admit some experiments were more successful than others.

"With the India pale ale, I think we overdid it on the hops, because it was really bitter," said senior Anson Burtch, who later produced a particularly tasty blackberry stout. "Now I understand what I'm doing, instead of throwing ingredients into a pot."

The classes have mostly been lectures by Asher, who relies heavily on the textbook "The New Complete Joy of Home Brewing" by Charlie Papazian (Avon Books, \$12, 1991).

Field trips, too

The class recently toured two Connecticut breweries, Elm City Brewing Co. in New Haven and Farmington River Brewing Co. in Bloomfield. Asher now hopes to work in a microbrewery after he graduates in May.

Bill Hodkin, co-owner of the Farmington River Brewing Co., was as enthusiastic about the class as Asher was of the profession.

"They're some of the best-educated brewers I've ever met," said Hodkin, who took courses in brewing science at the University of California at Davis, one of the few schools in the country to offer a formal curriculum for aspiring brewmasters.

The class's faculty adviser, chemistry professor Albert Fry, said he will taste samples of the students' homework to assess the quality of their efforts.

Fry had few illusions of academic purity when he approved the class. But he still requires lab notebooks to verify whether students did enough work to pass the ungraded tutorial.

"I would not claim that there is a lot of chemistry in it," he said. "It's in a way a lot like our physical education courses, where there's something of value, but it's not like taking an English class."

Senior Eve Crowell said that although the tutorial is perceived as a joke, the class has been worthwhile.

"It isn't vigorously academic, but it's teaching something that's useful, which is rare," she said.

This semester, she concocted "Eve's Evil Ale," a pale ale; "Me So Honey," a porter; and "I Found My Thrill," made with, of course, blueberries.

A magical process.

Brewing beer is not hard, but it does take time, some special equipment and supplies.

Many beer enthusiasts learn the brewing process from friends or books. In addition, some microbreweries across the state offer one-time brewing classes.

"Occasionally you'll find a community college offering classes like that along with pottery," said James Spence, administrator of the American Homebrewers Association in Boulder, Colo.

There are real beer connoisseurs, even on college campuses, and they don't drink to get drunk, said Asher.

Some have learned to appreciate the wide variety of flavors and textures that a little ingenuity can produce.

"I see brewing as a magical process, just the way everything seems to work out perfectly," Asher said. "The grains just happen to have these enzymes that turn the starches into sugars. The hops happen to stabilize the flavor of the beer and give it head retention. The yeast just happens to turn the sugars into alcohol and also have some nutrients."

"Chris is kind of this home-brewing guru on campus," said Dan Schaffer, another student in the class. "It's a lost art, something that everybody used to know how to do, and now nobody does. Most people think it's some kind of borderline illegal activity."