



University of Maryland
College of Agriculture and Natural Resources
1296 Symons Hall, 7998 Regents Drive
College Park, MD 20742

HB987 - Alcoholic Beverages - Use of Alcoholic Beverages for Educational Purposes
House Economic Matters Committee
Favorable

In 2021, the Maryland Higher Education Commission (MHEC) approved a new Bachelor of Science degree program in Fermentation Science to be offered at the University of Maryland College Park and at the Universities at Shady Grove. The Fermentation Science major explores the application of fundamental principles of the physical and biological sciences to understand the raw material inputs, the processes, and the final food and beverage products of fermentation. The science-based curriculum includes foundational courses in chemistry, biology, food science and plant science, with tracks focusing on viticulture, enology, brewing, cheese and dairy products, pharmaceuticals and biofuels. Through this program, the University of Maryland supports Maryland's workforce by providing graduates who have a solid foundation in the broad fermentation industries that include beverages (beer, wine, distilled spirits and kombucha), vegetable foods (kimchi, tempeh, and miso), dairy foods (cheese and yogurt) and biotechnology (biofuels and pharmaceuticals). Students learn not only about the fermentation process, but also about the agricultural production of grain, fruit, and flavor-enhancing plants. Graduates will be well prepared for career options in a variety of industries that use fermented products as their base.

The Fermentation Science major is a four-year course of study in which the first two years are dominated by foundational science and general education courses. In years three and four, students enroll in a series of specific courses that focus on various aspects of fermentation science. Components of several of these fermentation science courses involve the students in the study, evaluation and production of alcoholic beverages. Specifically:

1. "Viticulture and Enology" – A scientific introduction to viticulture (grape-growing) and enology (winemaking).
2. "Brewing and Distilling" – A scientific introduction to beer production and distillation of spirits, and brewery and distillery operations.

3. "Fermentation Science Laboratory" – An introduction to the microbiology and biochemistry of fermentation and the biotechnology involved in the production of fermented foods, beverages, pharmaceuticals and biofuels.
4. "Sensory Analysis Laboratory" – Development of students' sensory evaluation skills (taste, smell, feel, etc.) and understanding the science behind food sensory perception.
5. "Experiential Learning" – Opportunities for industry-embedded internships.

Existing Maryland law prohibits the University of Maryland from allowing students who are less than 21 years of age from enrolling in courses in which the students may be exposed to or provided access to alcoholic beverages as part of the course instruction. Therefore, currently, students must delay enrolling in the five courses listed above until after they reach 21 years of age.

The average age of a first-year, first-semester freshman student at the University of Maryland is 18 years old. The average student will reach 21 years of age by the beginning of their seventh semester, or the first semester of their Senior year, or 4th year. Of course, some students are older than the average age and some are younger than the average age. Under current legal restrictions, the average student is forced to schedule all 5 of the courses in which they may have access to alcoholic beverages into the two semesters of the final Senior year, which is extremely difficult to accomplish. For the average-age student who cannot squeeze these 5 courses into their Senior year schedule, or for the student who is younger than the average-age, the current age restriction will force the student to delay graduation and extend their time enrolled at the University of Maryland. If the student must include a full 5th year of study in order to register for these courses, they would incur extra tuition cost of approximately \$11,000 for Maryland residents and \$39,000 for out-of-state students.

Passage of this legislation would allow students to enroll in essential fermentation science courses that may provide access to alcoholic beverages prior to reaching 21 years of age. As an officially registered student, the student would be permitted access to alcoholic beverages for study, production, evaluation and tasting, but would not be permitted to consume or swallow any of the beverages. Hence, this controlled practice is known as "sip & spit". Similar legislation exists in at least 14 other states.

Based on University of Maryland fermentation science course enrollment projections and the estimated age distribution of 3rd and 4th year students in the fermentation science major, it is estimated that the provisions provided by this legislation would beneficially impact 30 to 50 University of Maryland students per year.

Thank you for your consideration and we urge a favorable report.

Dr. Frank J. Coale
Professor and Assistant Dean
fjcoale@umd.edu
301-405-0505