



SPECIAL REPORT

Higher Education

A college degree in cannabis is a real thing.
And it's a big sign the industry is legitimate.

by **STEPHANIE WILSON**

Full disclosure: WHEN I WAS GETTING MY DEGREE IN JOURNALISM FROM THE UNIVERSITY OF MASSACHUSETTS, AMHERST, I NEVER ONCE IMAGINED THAT I'D PUT IT TO USE ONE DAY IN THE LEGAL CANNABIS INDUSTRY. ALTHOUGH, TECHNICALLY, I'M NOT IN THAT INDUSTRY TODAY.

As the editor in chief of this magazine, I oversee a team of editors making a series of city lifestyle magazines covering markets across the country. Those magazines, like the one you're reading now, appeal to advertisers in the cannabis industry—companies eager to reach you, dear reader, and introduce you to their newly legal and therefore probably newly launched brand.

But technically, I don't work in cannabis. My job is indirectly related, my company ancillary. But it's still part of a growing stat, a field that just a few years ago didn't exist but now is the fastest growing industry in the US. There are more than 211,000 Americans working

job market for the cannabis industry. The research found that between December 2017 and December 2018, the number of job listings increased by 76 percent, covering highly diverse roles, from marketing to retail to research to agriculture to technology, logistics, and law. It concludes that "workers with higher education and skills in fields as varied as marketing, horticulture, and logistics will only be more desirable as the industry grows."

Even now, those skills are in high demand. Cannabis industry employers struggle to find qualified applicants to fill specific roles that require specialized knowledge—broad-based understanding and highly specific skills.

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full-time in the booming industry, directly employed in cannabis. When ancillary jobs such as mine are taken into account, that becomes 296,000.

That means in the US there are now more legal cannabis industry workers than dental hygienists, brewery workers (69,000), coal miners (52,000), and textile manufacturers (112,000). These figures come from a March 2019 special report by cannabis website Leafly with consultancy Whitney Economics, which looked at the stats the US Bureau of Labor Statistics won't touch, given that cannabis is still illegal on a federal level. But that isn't stopping it from booming growth, decreased stigma, and skyrocketing interest from all sides.

As of September 2019, 11 states and Washington, DC have legalized cannabis for adult-use, and 34 more have legalized medical use in some capacity. Legal cannabis sales in 2018 topped \$10.8 billion. The job market is heating up, and the demand for educated employees grows higher every day.

It's a wide-ranging industry, and there are a lot of career paths one could take within it. Beyond the obvious—dispensary manager, budtender, grower, trimmer—there are a ton of opportunities in the field. Career website Glassdoor released a report earlier this year on the state of the

Reacting to that employer demand, schools in the US are stepping up, introducing cannabis curriculum to help prepare students to enter the \$14-billion-and-rising global industry as trained professionals. From certificate programs to master's degrees, with everything in between, higher learning is here.

The first four-year undergraduate degree dedicated to teaching students about the cannabis industry was introduced fall 2017 at Northern Michigan University, under the innocuously titled Medicinal Plant Chemistry. Derek Hall, a spokesperson for NMU, says Professor Brandon Canfield suggested the idea for a medicinal plant chemistry degree program after attending a conference. "He came back thinking it was a place for us to step in. On the one side, you have the growers, and on the other side you have the users. In between, you have a chemistry lab measuring compounds—how much and what is being used. Those are the people we are interested in."

The degree program offers two different tracks: bio-analytical and entrepreneurial. The program description mentions that the additional focus means graduates will not only be qualified to perform the instrumental analysis in a laboratory, but "will also be empowered to build

their own testing laboratory, dispensary, and growing operation from the ground up.”

When the school announced the program, it wasn't expecting much interest, but it proved to be quite a viral topic. Hall says a lot of people were looking for a credential to help them get into the cannabis industry. “We fielded a ton of calls from people who were serious about it. One interesting thing is we had a lot of students who said, ‘My parents suggested it.’ A lot of others said they knew people who had benefited from the medicine.”

It's a very demanding program. “The heavy chemistry requirements are mind-boggling. Kids who are there are very, very serious,” Hall says. About 20 people signed

up for the program in the fall of 2017, when it opened to grads and undergrads. A year later, there were 225. “We're pulling in students from all over the country.”

Minot State in North Dakota introduced a similar program this year, making it only the second college to offer a four-year degree program specializing in cannabis. In the Rocky Mountain region, Colorado State University, Pueblo, offers a minor in Cannabis Studies, with courses focused on cannabis and its social, legal, historical, political, and health-related impact on society. The degree brochure mentions that “as part of a Hispanic Serving Institution, there is an emphasis on understanding and appreciating the impact cannabis has had on the Chicano/Chicana community and other regional populations of the Southwestern United States.”


In New York, SUNY Morrisville is introducing a Cannabis Industry minor this fall semester that combines courses in agricultural science, horticulture, and business programs. It also includes hands-on instruction in cultivating cannabis plants with less than 0.3 percent THC, thanks to the school's license to grow hemp.

In June 2019, University of Maryland announced the country's first postgraduate program in the field, a master's of science in Cannabis Science and Therapeutics. Associate degrees in the field are offered at Stockton University in New Jersey and at Philadelphia's University of Sciences, where students can earn an associate degree in Cannabis Health Therapy.

Even the Ivy League is getting into the field. Cornell launches “Cannabis: Biology, Society, Industry” course this fall, with plans to introduce a master's in cannabis next year. That program is said to have an emphasis on oral and written communication skills with media and industry stakeholders, according to reports from Quartz.

At Harvard, law students in a Cannabis Law class last spring considered “criminal law enforcement, land use, civil rights, banking, and other issues arising from the cultivation, distribution and use of marijuana for recreational and/or medical purposes.” The university, along with MIT, received a \$9 million alumni donation this summer earmarked for independent research on the influence of cannabis on brain health and behavior.

The University of Vermont's pharmacology course in Medical Cannabis is considered the first of its kind at a US academic institution, and the medical school is also the first to offer a professional certificate in cannabis and medicine. And it's fully online, led by faculty from the college, geared toward teaching doctors, pharmacists, nurses, PAs—medical professionals—what wasn't on the course lists whenever and wherever they earned their degrees.



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—Derek Hall, Northern Michigan University




Cannabis courses are popping up in undergrad and graduate programs at schools coast to coast, from UConn (Horticulture of Cannabis: From Seed to Harvest) to UC, Davis (*Cannabis sativa*: The Plant and its Impact on People). Even more institutions have launched certificate programs covering a range of topics. Clark University in Worcester, MA, introduced the country's first certificate program in cannabis control regulation. University of Las Vegas runs the Cannabis Academy through its continuing education division, with classes in cannabis and the opioids epidemic, cannabis professionals, and pets and cannabis.

Professor Paul Seaborn has taught a class titled the Business of Marijuana at University of Denver's Daniels College of Business for a few years now. Seaborn says after legalization in Colorado in 2012, it seemed like a good idea to approach the topic from an entrepreneurial point of view. He offered the first class in 2017, and it was the only accredited business school offering a class in cannabis at the time, open to undergrads and grads. "I've never had as many different people—alumni, staff members, parents, students—who showed interest."


The cannabis industry needs people who have general business skills to help those who don't. "A student might have a marketing or finance or accounting major, but we're adding on to that with history and regulation, so we can get the best candidates who can hit the ground running," says Seaborn. "It's a steep learning curve, and the competition has gotten more fierce. It's not guaranteed success. The bar keeps rising, and the more you can be prepared, the better."

To create the curriculum, Seaborn had to start from scratch. "When you teach a course, you use standard materials. In this area, there is no road map. You have to figure it out on your own." Seaborn drew on people working in the new Colorado industry as guest speakers, and found many eager to help. *Business Insider* reports that the semester culminates with a field trip to Sweet Grass Kitchen, where students tour the facility and hear from management, including marketing director Jesse Burns.

Burns has an MBA from the University of Colorado, Boulder. "It's been the foundation that I've built my career on," Burns says. "The skills I acquired helped me do the best and become successful and achieve goals. Having that formal education helped me see the bigger picture and helped give me the confidence to make the best decisions." And as the manager, he does a lot of the hiring. He is so very excited to see more qualified applicants enter the field—ones with an education specific to the industry.

"A lot of students are ready," says Seaborn. "It's a question of universities catching up to them." 

Leland Rucker contributed reporting to this article.



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