## **CANNABIS CHEMISTRY, BS**

## **Program Description**

The bachelor of science in Cannabis Chemistry equips graduates with the skills necessary to gain employment in the emerging cannabis markets in Michigan, the United States, and beyond. Cannabis Chemistry graduates earn over 600 hours of hands-on, laboratory experience to prepare them for a career as chemist in the cannabis field. Cannabis chemists leave trained on state of the art instrumentation and in techniques that are industry standards. The chemistry program at Lake Superior State University is approved by the American Chemical Society.

## **Program Learning Outcomes**

- Demonstrate proficiency in the following Chemistry sub disciplines: analytical chemistry, biochemistry, and organic chemistry.
- The B.S. Cannabis Chemistry student will be well prepared for employment within the field or graduate-level study.
- With the guidance of a faculty mentor, develop a well-designed, well-executed, and clearly communicated research project that contributes to scientific knowledge in the field of Cannabis Chemistry.

## **Degree Requirements**

Code	Title	Hours	
Chemistry Degree Requirements			
CHEM 115	General Chemistry I	5	
CHEM 116	General Chemistry II	5	
CCHM 120	Cannabis Chemistry I	1	
CHEM 199	Chemistry First Year Seminar	1	
CHEM 225	Organic Chemistry I	4	
CHEM 231	Quantitative Analysis	4	
CHEM 236	Chemistry of Soil	3	
or BIOL 235	Int to Protected Horticulture		
CCHM 240	Cannabis Plant Prep Chem Anlys	2	
CCHM 245	Cannabis Chemistry II	1	
CCHM 250	Cannabis Production	1	
CHEM 299	Chemistry Sophomore Seminar	1	
CHEM 326	Organic Chemistry II	4	
CHEM 332	Instrumental Analysis	4	
CCHM 350	Cannabis Chemistry III	1	
CHEM 351	Introductory Biochemistry	4	
CHEM 353	Medicinal Chemistry/Toxicology	3	
CHEM 410	Molecular Spectroscopy	4	
CCHM 420	Cannabis Extract/Purifications	2	
CCHM 440	Cannabis Separations Chemistry	4	
Choose Research or Course Option:			
<b>Research Option</b>			
CHEM 395	Junior Seminar	1	
CHEM 49X	Senior Research	2	
CHEM 499	Senior Seminar	1	
Course Option			
4 Credits of CHEM/CCHM 3XX or Higher			
Support Courses			
BIOL 131	General Biology: Cells	4	

Total Hours		83
ECON 20X	Principles of Micro or Macroeconomics	3
MATH 207	Prin of Statistical Methods	3
MATH 111	College Algebra	3
BIOL 204	General Microbiology	4
BIOL 132	General Biology: Organisms	4

**General Education:** All LSSU bachelor's degree candidates must complete the LSSU General Education Requirements.

A minimum of 124 credits (at the 100 level or higher) must be earned for graduation with a cumulative gpa of 2.00 or higher. A gpa of 2.00 or higher is also required in your Major, and a gpa of 2.00 is required in your General Education Requirements.