



Wayne County Community College District

COURSE SYLLABUS

BRW 200 Brewing Science

CREDIT HOURS: 4.00

CONTACT HOURS: 60.00 HL / 30 HLB

COURSE DESCRIPTION:

This class will cover the chemistry, biochemistry, and microbiology as it applies to the brewing process. Emphasis will be placed on yeast and fermentation science.

PREREQUISITES: BRW 101

COREQUISITES: BRW 210

EXPECTED COMPETENCIES:

Upon successful completion of the course, the student will:

- Understand pH/ Acid-Base chemistry.
- Understand cell biology.
- Be able to discuss the different enzymes their roles with starch, cell walls, and hydrolysis reactions.
- Understand the biology of fermentation and the processes of alcohol creation.
- Discuss biochemical processes of germination to include enzyme production, cell wall degradation, starch breakdown, and protein breakdown.
- Understand the microbiology of brewing by knowing the differences between good/bad yeast and microbes as well as their effects on beer.
- Understand and be able to use the various media needed to test for different microbes during the brewing process.
- Be able to perform simple and gram stains while understanding the implications of the results.
- Be able to recognize different yeasts and microbes.
- Understand and be able to discuss lab methods and instrumentation.

ASSESSMENT METHODS:

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

GRADING SCALE:

90%-100% = A
80%-89.9% = B
70%-79.9% = C
60%-69.9% = D
<60% = E