

Course Outline (Higher Education)

School:	School of Health and Life Sciences
Course Title:	BREWING RAW MATERIALS
Course ID:	SCBRW5081
Credit Points:	15.00
Prerequisite(s):	Nil
Co-requisite(s):	Nil
Exclusion(s):	Nil
ASCED Code:	019905

Description of the Course :

This course will describe the raw materials which are used to produce beer and related products. It will include the structure and chemical composition of barley and the biochemical changes and process of its conversion to malt. It will also cover the chemistry and processing of hops and hop products, the use of cereal and sugar adjuncts, and brewing water chemistry.

Grade Scheme: Graded (HD, D, C, etc.)

Work Experience:

No work experience: Student is not undertaking work experience in industry.

Placement Component: No

Supplementary Assessment: Yes

Where supplementary assessment is available a student must have failed overall in the course but gained a final mark of 45 per cent or above and submitted all major assessment tasks..

Program Level:

AQF Level of Program						
	5	6	7	8	9	10
Level						
Introductory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✓	<input type="checkbox"/>	<input type="checkbox"/>
Intermediate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advanced	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Learning Outcomes:

Knowledge:

- K1.** Define and describe the raw materials used in the production of fermented, malt-based beverages.
- K2.** Identify and define the processes and parameters used in the production of barley malt.

Course Outline (Higher Education)

SCBRW5081 BREWING RAW MATERIALS

- K3.** Relate the quality attributes used to measure barley malt quality with malt modification.
- K4.** Compare and contrast the production and utilisation of hops and hop products.
- K5.** Describe the sources, quality parameters and treatment processes of brewery water.
- K6.** Contrast dogma, theory and facts in brewing.

Skills:

- S1.** Assess raw material specification sheets.
- S2.** Effectively and efficiently access information relevant to brewing.
- S3.** Communicate by written means using different media.

Application of knowledge and skills:

- A1.** Evaluate the suitability of brewing raw materials.
- A2.** Critically evaluate scientific data.
- A3.** Select the appropriate analysis for evaluating raw materials.

Course Content:

The following material will be normally presented during this course.

Topics may include:

- Structure and chemical composition of barley.
- Malting technology and biochemistry.
- Cereal and sugar adjuncts.
- Hop science and technology.
- Brewing water chemistry.
- How raw materials influence flavour active compounds.
- Process aids.

Values:

- V1.** To develop a responsible attitude to the production and consumption of alcoholic beverages.
- V2.** To develop an awareness of the differences in cultural beliefs about alcoholic beverages.

Graduate Attributes:

FedUni graduate attributes statement. To have graduates with knowledge, skills and competence that enable them to stand out as critical, creative and enquiring learners who are capable, flexible and work ready, and responsible, ethical and engaged citizens.

Attribute	Brief Description	Focus
Knowledge, skills and competence	Skills to find and interpret information independently.	High
Critical, creative and enquiring learners	Independent learning.	High
Capable, flexible and work ready	The role of alcoholic beverages in society.	Low
Responsible, ethical and engaged citizens	Safety in the working environment.	Medium

Learning Task and Assessment:

Course Outline (Higher Education)

SCBRW5081 BREWING RAW MATERIALS

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1-K5, S2, A2	Tutorial questions - short answers to technical questions covering all aspects of brewing raw materials.	Tutorial questions.	30-50%
S1-S3, A1-3 and any of K1-K5	Assignment - an essay topic describing quality parameters of raw materials.	Assignment.	20-40%
K1-K5, S2	On-line multiple choice tests.	On-line tests.	20-30%
K6, S3	Discussion board (or other media) contribution.	Written comments.	10%

Adopted Reference Style:

Australian