



School:	School of Health and Life Sciences			
Course Title:	MALTING AND BREWING SCIENCE			
Course ID:	SCBRW1081			
Credit Points:	15.00			
Prerequisite(s):	Nil			
Co-requisite(s):	Nil			
Exclusion(s):	(SF732)			
ASCED:	019905			

#### **Description of the Course :**

The course covers the complex processes found in the production of barley malt and the conversion of the barley malt to beer. The primary learning vehicle will be the production of beer from the malts using the pilot scale brewery. Topics for discussion may include: brewing raw materials; malting science and technology; wort production; properties of brewer's yeast; fermentation science; post-fermentation processing; and, analysis of beer quality.

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:**

Level of course in Program	AQF Level of Program					
	5	6	7	8	9	10
Introductory			~			
Intermediate						
Advanced						



# Learning Outcomes:

### **Knowledge:**

- K1. Define and describe the raw materials used in the production of beer
- K2. Identify and define the processes involved in the production of barley malt
- K3. Assess criteria of barley, malt and beer quality
- K4. Identify and describe the steps involved in the brewing process
- K5. Explain the regulatory environment for alcoholic beverage production

#### Skills:

- **S1.** Perform routine analyses in the production of beer
- **S2.** Find, evaluate and communicate information about brewing
- **S3.** Perform basic brewing calculations

## Application of knowledge and skills:

- **A1.** Evaluate and plot data derived from wort and beer analyses
- A2. Critically evaluate malt and beer specification sheets
- A3. Identify the hazards of working in a brewery

#### **Course Content:**

The course covers the science and practice of malting and brewing.

Topics may include:

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- brewing raw materials
- malting science and technology;
- wort production;
- properties of brewer's yeast;
- fermentation science;
- post-fermentation processing;
- analysis of beer quality.

#### Values:

- **V1.** Appreciate the value of cooperation in team based tasks
- V2. Appreciate that alcohol can have both positive and negative effects in society

#### Learning Task and Assessment:

Learning Outcomes Assessed	Learning Tasks	Assessment Type	Weighting
K1, K3, K4, K5, S1, S3, A1 - A3	Brewing practical and report	Laboratory based project and written report	20 - 40%
S2, K1 - K5	Research & reporting on a specific topic in brewing	Assignment (Written report) and/or oral presentation	10 - 30%
A2, K1 - K5	Recall and comprehension of fundamental concepts	On-line quizzes	5 - 20%
K1 - K5	Written response	Examination	30 - 40%



# Adopted Reference Style:

Australian Harvard

Course Outline (Higher Education) SCBRW1081 MALTING AND BREWING SCIENCE