

DEPARTMENT OF BOTANY
DEVASWOM BOARD COLLEGE, THALAYOLAPARAMBU
SYLLABUS FOR VALUE ADDED COURSE IN BOTANY (2021-2022)

Course Code: BOVA 02

Title of Course: Enology for Beginners

Semester I

Contact Hours: 30

Aim: - To appreciate the process of fermentation and its wide spread application

Objectives

- To impart knowledge on application of fermentation technique in baking and brewing industry.
- Create an interest among students to observe and appreciate the process of fermentation in making value added products
- To Develop Entrepreneurship skills

Topics	Hours
ENOLOGY FOR BEGINNERS	
Module 1 Microbiology and its application in food processing and preservation 1.1. History and developments in the field of Fermentation technology. 1.2. Applications of fermentation	4
Module 2 2.1. Fermentation- Principle, Micro -organisms and Fermentation, 2.2. Types of fermentation 2.3 Alcoholic Fermentation 2.3 Process of Fermentation and limitations	8
Module 3 3.1. Wine and Health 3.2 Value added products from fermentation industry	4
Practical applications of Enology Familiarising different Wine making procedures using selected fruits and plant parts	14

References

1. Battcock, M. and S. Azam Ali. (2001). Fermented Foods and Vegetables. FAO Agric. Services Bull. 134.
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3. Donald Voet and Judith G Voet. (1999). Fundamentals of Biochemistry, John Wiley & Sons, NY.
4. Gayon, P R., Dubourdieu, D , Doneche, b Lonvaud, A. (2006). Hand book of Enology. E book
5. Garrett, R.H. and C.M. Grisham. (1999). Biochemistry, 2nd edition, by Saunders CollegePublishing, NY.
6. Goode, J and Harrop, S. (2011). Authentic wine : Toward Natural and Sustainable Wine making
7. Lehninger: by David L. Nelson and M.M. Cox. (2000). Principles of Biochemistry, 3rd edition. ,Maxmillan and Worth Publishers. (2000)
8. Murray, R.K., P.A.Hayes, D.K.Granner, P.A. Mayes and V.W. Rodwell. (2000). Harper'sBiochemistry, 25th edition, Prentice Hall International.
9. Stryer, L. (1995). Biochemistry, 4th edition, W.H. Freeman & Co., NY. (1995).
10. Thomas J., Montville K.R.M. (2008). Food Microbiology. An Introduction. 2nd ed. ASM Press; Washington, DC, USA.
11. Wood B.J.B. (1998). Microbiology of Fermented Foods. Blackie Academic Professional; London, UK.