

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Yeasts
Course number	BIOL4375
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - To study the yeasts including biodiversity and potential application
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Intended Learning Outcomes

Knowledge and Understanding	* Ecology and biodiversity of yeast with potential value in biotechnology also focus on the yeast formation, utilization, pathogenicity and biological control
Intellectual Skills	* Identification of yeast
Professional Skills	* Isolation of yeast using aseptic technique
General Skill	* effectively team work for intensive learning

Course Contents

1 - Introduction to yeast, Biodiversity and Potential Applications of Antarctic Yeasts
2 - Basidiomycetous Yeasts
3 - Hansenula polymorpha (Pichia angusta)
4 - Debaryomyces hansenii : An Osmotolerant and Halotolerant Yeast
5 - Candida famata (Debaryomyces hansenii)
6 - Pichia guilliermondi
7 - Assimilation of Unusual Carbon Compounds
8 - Ecology and Biodiversity of Yeasts with Potential Value in Biotechnology
9 - Yeasts Diversity in Fermented Foods and Beverages
10 - Utilization of Yeasts in Biological Control Programs
11 - Opportunistic Pathogenic Yeasts
12 - Interaction Between Yeasts and Zinc, Glutathione Production in Yeast
13 - Yeast Genetics
14 - Biotechnological Applications

Teaching and Learning Methods

1 - Lectures, Revision and Discussion sections and Student presentation

Teaching and Learning Methods for the Disabled Students

1 - None

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
First hour exam	60minutes	20
Second hour exam	60minutes	20
Attendance		10
Final exam	120minutes	50

Books and References

Course note	1- 2009, Yeast Biotechnology: Diversity and Applications, T. Satyanarayana and Gotthard Kunze
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