# Singhania University

(UGC- recognized university per section 2(f) of the UGC Act 1956)

# **COURSE OUTLINE**

COURSE TITLE	Biology and Diversity of Algae, Fungi and Bryophytes	
Course Code	BOT-101	
Credits	4 ( L: 3 ,P:2 ,5)	
Faculty Name	Dr. PREETI SENGAR GARG	
Program	MASTER IN BOTANY	
Academic Year and Semester	w.e.f. 2024-25, 1 <sup>st</sup> Semester	

# 1. Course Description

different variety of plant and Differentiate (Microbes, Algae, Fungi and Archegoniate )

# 2. At the end of this course, students should be able to:

- 1. Understand the different variety of plant .
- 2. Differentiate (Microbes, Algae, Fungi and Archegoniate
- 3. Familiar about their family, class and examples

# 3. Required Textbook and Reference Material:

• Material will be provided by faculty.

#### 4. Session Plan :

Session plan will be provided by faculty members according to the syllabus.

#### 5. Evaluation:

COMPONENT	WEIGHTAGE	DETAILS
Assignment	10%	Sheet Work( A-4 Size sheet in a well mannered way )
Tests	10%	Test would be taken to assess the knowledge about topics related to daily basis classes.
Attendance & Classroom participation	10%	Students should have at least 75% attendance

Mid- Sem Exam	Mid term exam must be cleared by students for appearing in final examination.
End- Sem Exam	The end term exam must be cleared for appearing in next semester with a minimum passing criteria .

• Please note that students involved in academic dishonesty will receive a **ZERO** grade on the particular component in which the infraction occurred.

• Academic dishonesty consists of misrepresentation by deception or by other fraudulent means. In an academic setting this may take the form of copying or use of unauthorized aids in tests, assignments, examinations, term papers, or cases; plagiarism; talking during in-class examinations; submission of work that is not your own without citation; submission of work generated by another person; aiding and abetting another student's dishonesty; and giving false information for the purpose of gaining credits.

#### 7. No Network Policy

Students cannot operate any network enabled devices such as cell phones, e- tabs, I -pads or any other electronic network enabled devices inside the classroom during the sessions unless specifically instructed by the faculty. In case you are compelled to carry it in person, you may keep it in the switched off mode. Anyone found to operate such devices during the session timings will be penalized as per the rules. No discussion or negotiation will be entertained at all with respect to this.

COURSE TITLE	Biology and Diversity of Pteridophytes, and Gymnosperms: Extant & Extinct		
Course Code	BOT-102		
Credits	4 ( L: 3 ,P:2 ,5)		
Faculty Name	Dr. PREETI SENGAR GARG		
Program	MASTER IN BOTANY		
Academic Year and Semester	w.e.f. 2024-25, 1 <sup>st</sup> sem		

#### 1. Course Description

Different variety of pteridophytes anfd gumnosperm **2. Student Learning Outcomes :** 

At the end of this course, students should be able to:

After completing this course, the learner will be able to:

1variation in plant kingdom :- pteridophytes and gymnosperm

# 3. Required Textbook and Reference Material:

• Material will be provided by faculty.

# 4. Session Plan :

Session plan will be provided by faculty members according to the syllabus.

# 5. Evaluation:

COMPONENT	WEIGHTAGE	DETAILS
Assignment	10%	Sheet Work( A-4 Size sheet in a well mannered way )
Tests	10%	Test would be taken to assess the knowledge about topics related to daily basis classes.
Attendance & Classroom participation	10%	Students should have at least 75% attendance
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COURSE TITLE	Tools and techniques	
Course Code	BOT-103	
Credits	2 ( L: 1 ,P: 1,2)	
Faculty Name	Dr. PREETI SENGAR GARG	
Program	MASTER IN LIFE SCIENCE	
Academic Year and Semester	w.e.f. 2024-25, 1 <sup>st</sup> Semester	

# 1. Course Description

Botany is a program in life Science. The objective of this subject is to enable the students to prepare data in a best way.

# 2. Student Learning Outcomes :

# At the end of this course, students should be able to:

Technique used in the botanical field and learn about various tools +

# 3. Required Textbook and Reference Material:

• Material will be provided by faculty.

#### 4. Session Plan :

• Session plan will be provided by faculty members according to the syllabus.

COMPONENT	WEIGHTAGE	DETAILS
Assignment	10%	Sheet Work( A-4 Size sheet in a well mannered way )
Tests	10%	Test would be taken to assess the knowledge about topics related to daily basis classes.
Attendance & Classroom participation	10%	Students should have at least 75% attendance
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COURSE TITLE	Biodiversity: Conservation and Utilization	
Course Code	BOT-104	
Credits	4 (L:3 ,T:1, 4)	
Faculty Name	Dr. PREETI SENGAR GARG	
Program	MASTER IN LIFE SCIENCE	
Academic Year and Semester	w.e.f. 2024-25, 1 <sup>st</sup> Semester	

# 1. Course Description

Botanybiodiversity ) is an minor program in. The objective of this is to enable the students to ensure the connection of daily life in biotechnology field .

# 2. Student Learning Outcomes :

# At the end of this course, students should be able to:

- 1. learn different type of vaccine and medicine preparation and role of biodiversity
- 3. Required Textbook and Reference Material:
  - Material will be provided by faculty.

# 4. Session Plan :

• Session plan will be provided by faculty members according to the syllabus.

# 5. Evaluation:

COMPONENT	WEIGHTAGE	DETAILS
Assignment	10%	Sheet Work( A-4 Size sheet in a well mannered way )
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will be entertained at all with respect to this.

COURSE TITLE	Angiosperm Systematics	
Course Code	BOT-201	
Credits	2 (L:1 ,T:1, 2)	
Faculty Name	Dr. PREETI SENGAR GARG	
Program	MASTER IN BOTANY	
Academic Year and Semester	w.e.f. 2024-25, 2 <sup>st</sup> Semester	

# 1. Course Description

Angiosperm Systematics is a essential subject 2. Student Learning Outcomes :

At the end of this course, students should be able to:

 ${f 1}$  Aftercompletingthiscourse,thelearner willdemonstrateknowledgeof: Reproduction in various plants

# 3 Required Textbook and Reference Material:

• Material will be provided by faculty.

# 4. Session Plan :

• Session plan will be provided by faculty members according to the syllabus.

# 5. Evaluation:

COMPONENT	WEIGHTAGE	DETAILS
Assignment	10%	Sheet Work( A-4 Size sheet in a well mannered way )
Tests	10%	Test would be taken to assess the knowledge about topics related to daily basis classes.
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COURSE TITLE	Plant Pathology	
Course Code	BOT-202	
Credits	3 ( T:3 P:0,3)	
Faculty Name	Dr. preeti sengar garg	
Program	Master in botany	
Academic Year and Semester	w.e.f. 2024-25, 2nd Semester	

# 1. Course Description

Biology and Diversity of Pteridophytes and Gymnosperms (Extant & Extinct)) is" **multi disciplinary**" subject in master in botany

# 2. Student Learning Outcomes :

At the end of this course, students should be able to:

1. Learn and correlate Pteridophytes and Gymnosperms

# 3. Required Textbook and Reference Material:

• Material will be provided by faculty.

# 4. Session Plan :

- Session plan will be provided by faculty members according to the syllabus.
- 5. Evaluation:

COMPONENT	WEIGHTAGE	DETAILS
Assignment	10%	Sheet Work( A-4 Size sheet in a well mannered way )
Tests	10%	Test would be taken to assess the knowledge about topics related to daily basis classes.
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COURSE TITLE	Cell and Molecular Biology	
Course Code	BOT-203	
Credits	4 (L:3 ,T:1 ,4)	
Faculty Name	Dr. PREETI SENGAR GARG	
Program	MASTER IN BOTANY	
Academic Year and Semester	w.e.f. 2024-25, 2 <sup>nd</sup> Semester	

Cell and Molecular Biology is an essential program master in botany

## 2. Student Learning Outcomes :

#### At the end of this course, students should be able to:

ecological factors, community and ecosysytem and various impact of factors on ecosystem
2\*. Student will gain the knowledge about the practical aspects related to identification, structure, economic values of microorganisms, algae, fungi, bryophytes, pteridophytes gymnosperms, and angiosperms

# 3. Required Textbook and Reference Material:

 Material will be provided by faculty.

#### 4. Session Plan :

• Session plan will be provided by faculty members according to the syllabus.

COMPONENT	WEIGHTAGE	DETAILS
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COURSE TITLE	Plant Structure, Development and Reproduction	
Course Code	BOT-204	
Credits	3( L:2,T:1,3)	
Faculty Name	Dr.PREETI SENGAR GARG	
Program	MASTER IN BOTANY	
Academic Year and Semester	w.e.f. 2024-25, 2 <sup>nd</sup> Semester	

# 1. Course Description:

Plant Structure, Development and Reproduction IS A MAJOR course" in MASTER IN BOTANY

2. Student Learning Outcomes :

At the end of this course, students should be able to:

1. Gain knowledge of different developmental stage of vertebrae

# 3. Required Textbook and Reference Material:

• Material will be provided by faculty.

# 4. Session Plan :

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# 5. Evaluation:

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