

Lesson Plan

Name of the Assistant professor: Dr. Brahmanand Dahiya

Class and Section: B.Sc.(Medical) 1st year (2nd semester)

Subject: Botany

Lesson Plan: 17 weeks of (Lesson Plan Format lesson: January 2018 to April 2018)

Week 1 Chapter 1: Bryophytes
Assignments
Week 1, Monday, 1 January 2018 <ul style="list-style-type: none">• 1.1.1. Bryophytes- general introduction• 1.1.2. characteristics• 1.1.3. Reproduction
Week 1, Tuesday, 2 January 2018 <ul style="list-style-type: none">• 1.1.4. classification
Week 1, Wednesday, 3 January 2018 <ul style="list-style-type: none">• 1.1.5. economics importance
Week 1, Thursday, 4 January 2018 <ul style="list-style-type: none">• 1.2.1. Hepaticopsida- silent features
Week 1, Saturday, 6 January 2018 <ul style="list-style-type: none">• 1.2.1. Marchantia-characteristics• 1.2.2. Morphology
Week 2 Chapter 1: Bryophytes
Week 2, Monday, 8 January 2018 <ul style="list-style-type: none">• 1.2.3. Marchantia- Asexual Reproduction• 1.2.4. sexual Reproduction
Week 2, Tuesday, 9 January 2018 <ul style="list-style-type: none">• 1.2.5. sporophyte
Week 2, Wednesday, 10 January 2018 <ul style="list-style-type: none">• 1.3.1. Anthocerotopsida- Introduction
Week 2, Thursday, 11 January 2018 <ul style="list-style-type: none">• 1.3.2. Anthoceros- Morphology
Week 2, Friday, 12 January 2018 <ul style="list-style-type: none">• 1.3.3. Reproduction

<p>Week 2, Saturday, 13 January 2018</p> <ul style="list-style-type: none"> • 1.3.4. sporophyte and life cycle
<p>Week 3</p> <p>Chapter 1: Bryophytes</p>
<p>Week 3, Monday, 15 January 2018</p> <ul style="list-style-type: none"> • 1.4.1. Bryopsida-Introduction
<p>Week 3, Tuesday, 16 January 2018</p> <ul style="list-style-type: none"> • 1.4.2. Funeria-characteristics
<p>Week 3, Wednesday, 17 January 2018</p> <ul style="list-style-type: none"> • 1.4.3. Morphology
<p>Week 3, Thursday, 18 January 2018</p> <ul style="list-style-type: none"> • 1.4.5. Sporophyte and life cycle
<p>Week 3, Friday, 19 January 2018</p> <ul style="list-style-type: none"> • Assignment distribution
<p>Week 3, Saturday, 20 January 2018</p> <ul style="list-style-type: none"> • 2.1.1. Pteridophytes- introduction
<p>Week 4</p> <p>Chapter 2: Pteridophytes</p>
<p>Week 4, Tuesday, 23 January 2018</p> <ul style="list-style-type: none"> • 2.1.2. Pteridophytes –Introduction • 2.1.3. characteristics
<p>Week 4, Wednesday, 24 January 2018</p> <ul style="list-style-type: none"> • 2.1.4. Pteridophytes Classification
<p>Week 4, Thursday, 25 January 2018</p> <ul style="list-style-type: none"> • 2.1.5. Pteridophytes life cycle
<p>Week 4, Saturday, 27 January 2018</p> <ul style="list-style-type: none"> • 2.1.6. Pteridophytes stellar system
<p>Week 5</p> <p>Chapter 2: Pteridophytes</p>
<p>Week 5, Monday, 29 January 2018</p> <ul style="list-style-type: none"> • 2.2.1. Psilopsida- silent features
<p>Week 5, Tuesday, 30 January 2018</p> <ul style="list-style-type: none"> • 2.2.2. Rhynia – introduction and morphology
<p>Week 5, Thursday, 1 February 2018</p> <ul style="list-style-type: none"> • 2.3.1. Lycopsida – silent features
<p>Week 5, Friday, 2 February 2018</p> <ul style="list-style-type: none"> • 2.3.2. Selaginella – Introduction
<p>Week 5, Saturday, 3 February 2018</p> <ul style="list-style-type: none"> • 2.3.2. Selaginella – morphology

Week 6 Chapter 2: Pteridophytes
Week 6, Monday, 5 February 2018 <ul style="list-style-type: none"> • 2.3.3. Selaginella – Asexual reproduction
Week 6, Tuesday, 6 February 2018 <ul style="list-style-type: none"> • 2.3.4. Selaginella – sexual reproduction
Week 6, Wednesday, 7 February 2018 <ul style="list-style-type: none"> • 2.4.1. Sphenopsida – silent features
Week 6, Thursday, 8 February 2018 <ul style="list-style-type: none"> • 2.4.1. Equisetum – characteristics • 2.4.2. morphology
Week 6, Friday, 9 February 2018 <ul style="list-style-type: none"> • 2.4.3. Equisetum – Anatomy
Week 7 Chapter 2: Pteridophytes
Week 7, Monday, 12 February 2018 <ul style="list-style-type: none"> • 2.4.4. Equisetum – reproduction by spores
Week 7, Wednesday, 14 February 2018 <ul style="list-style-type: none"> • 2.4.5. Equisetum – reproduction by gametophytes
Week 7, Thursday, 15 February 2018 <ul style="list-style-type: none"> • 2.4.6. Equisetum – life cycle
Week 7, Friday, 16 February 2018 <ul style="list-style-type: none"> • 2.5.1. Pteripsida– silent features
Week 7, Saturday, 17 February 2018 <ul style="list-style-type: none"> • 2.5.2. pteris – general characteristics
Week 8 Chapter 2: Pteridophytes
Week 8, Monday, 19 February 2018 <ul style="list-style-type: none"> • 2.5.3. pteris – external features
Week 8, Tuesday, 20 February 2018 <ul style="list-style-type: none"> • 2.5.4. pteris – internal features
Week 8, Wednesday, 21 February 2018 <ul style="list-style-type: none"> • 2.5.5. pteris – reproduction- sporophytic
Week 8, Thursday, 22 February 2018 <ul style="list-style-type: none"> • 2.5.6. pteris – reproduction- gametophytic
Week 8, Friday, 23 February 2018 <ul style="list-style-type: none"> • 2.5.7. pteris – life cycle
Week 8, Saturday, 24 February 2018 <ul style="list-style-type: none"> • Discussion class

Week 9 unit test conduction
Week 9, Monday, 26 February 2018 <ul style="list-style-type: none"> • Unit test of paper 1
Week 9, Tuesday, 27 February 2018 Presentation on Assignment of paper 1
Week 10 Chapter 1: DNA as genetic material
Week 10, Monday, 05 march 2018 <ul style="list-style-type: none"> • 1.1.1. DNA as genetic material: general introduction
Week 10, Tuesday, 06 march 2018 <ul style="list-style-type: none"> • 1.1.2. Identification of DNA as genetic material
Week 10, Wednesday, 07 march 2018 <ul style="list-style-type: none"> • 1.1.3. Molecular structure of DNA
Week 10, Thursday, 08 march 2018 <ul style="list-style-type: none"> • 1.1.4. Double helix structure of DNA • 1.1.5. Properties of DNA • 1.1.6. Types of DNA
Week 10, Friday, 09 march 2018 <ul style="list-style-type: none"> • 1.2.1. DNA-Protein Interaction
Week 10, Saturday, 10 march 2018 <ul style="list-style-type: none"> • 2.1.1. Replication of DNA-Introduction
Week 11 Chapter 2: Replication of DNA
Week 11, Monday, 12 march 2018 <ul style="list-style-type: none"> • 2.1.2. Replication of DNA-mechanism
Week 11, Tuesday, 13 march 2018 <ul style="list-style-type: none"> • 2.1.3. Genetic code
Week 11, Wednesday, 14 march 2018 <ul style="list-style-type: none"> • 3.1.1. Genetic Inheritance: Introduction
Week 11, Thursday, 15 march 2018 <ul style="list-style-type: none"> • 3.1.2. Genetic Inheritance: Mendel's experiments
Week 11, Friday, 16 march 2018 <ul style="list-style-type: none"> • 3.1.3. Genetic Inheritance: Mendel's law of inheritance
Week 11, Saturday, 17 march 2018 <ul style="list-style-type: none"> • 3.1.4. Genetic Inheritance: importance of mendelism
Week 12 Chapter 4: Linkage
Week 12, Monday, 19 march 2018

<ul style="list-style-type: none"> • 4.1.1. Linkage : Introduction
<p>Week 12, Tuesday, 20 march 2018</p> <ul style="list-style-type: none"> • 4.1.2. Linkage : chromosomal theory of linkage
<p>Week 12, Wednesday, 21march 2018</p> <ul style="list-style-type: none"> • 4.1.3. Linkage :linkage groups and linkage maps
<p>Week 12, Thursday, 22 march 2018</p> <ul style="list-style-type: none"> • 5.1.1 Gene interactions: introduction • 5.1.2. Polygenes
<p>Week 12, Friday, 23 march 2018</p> <ul style="list-style-type: none"> • 5.1.3. Inter allelic interactions
<p>Week 12, Saturday, 24 march 2018</p> <ul style="list-style-type: none"> • 5.1.4. Codominance
<p>Week 13</p> <p>Chapter 5: Gene interactions</p>
<p>Week 13, Monday, 26 march 2018</p> <ul style="list-style-type: none"> • 5.1.5. Lethal genes
<p>Week 13, Tuesday, 27 march 2018</p> <ul style="list-style-type: none"> • 5.1.6.Non- allelic interactions
<p>Week 13, Wednesday, 28 march 2018</p> <ul style="list-style-type: none"> • 5.1.5. Epistasis
<p>Week 13, Thursday, 29 march 2018</p> <ul style="list-style-type: none"> • 5.1.5. duplicate genes
<p>Week 13, Friday, 31 march 2018</p> <ul style="list-style-type: none"> • 6.1.1. Genetic variations: introduction
<p>Week 14</p> <p>Chapter 6: Genetic variation</p>
<p>Week 14, Monday, 2 April 2018</p> <ul style="list-style-type: none"> • 6.1.1. mutations
<p>Week 14, Tuesday, 3 April 2018</p> <ul style="list-style-type: none"> • 6.1.2. Molecular basis of mutations
<p>Week 14, Wednesday, 4 April 2018</p> <ul style="list-style-type: none"> • 6.1.3. mutagens
<p>Week 14, Thursday, 5 April 2018</p> <ul style="list-style-type: none"> • 6.2.1. Transposable elements
<p>Week 14, Friday, 6 April 2018</p> <ul style="list-style-type: none"> • 6.3.1. DNA repair systems
<p>Week 14, Saturday, 7 April 2018</p> <ul style="list-style-type: none"> • 7.1.1. RNA and Ribosomes: introduction
<p>Week 15</p>

Chapter 7: RNA and Ribosomes
Week 15, Monday, 9 April 2018 7.1.1. RNA and Ribosomes: Types of RNA
Week 15, Tuesday, 10 April 2018 <ul style="list-style-type: none"> 7.2.1. RNA and Ribosomes: Ribosomes
Week 15, Wednesday, 11 April 2018 <ul style="list-style-type: none"> 8.1.1. Gene Expression: flow of genetic material
Week 15, Thursday, 12 April 2018 <ul style="list-style-type: none"> 8.2.1. Gene Expression: Transcription
Week 15, Friday, 13 April 2018 <ul style="list-style-type: none"> 8.2.2. post Transcription modification
Week 16 Chapter 8: Gene Expression
Week 16, Monday, 16 April 2018 <ul style="list-style-type: none"> 8.3.1. Translation
Week 16, Tuesday, 17 April 2018 <ul style="list-style-type: none"> 8.3.1. Post Translation Modification
Week 16, Wednesday, 18 April 2018 <ul style="list-style-type: none"> 8.4.1. Difference between Transcription and Translation
Week 16, Thursday, 19 April 2018 <ul style="list-style-type: none"> 9.1.1. regulation of gene expression: Introduction
Week 16, Friday, 20 April 2018 <ul style="list-style-type: none"> 9.1.2. regulation of gene expression: Prokaryotes
Week 16, Saturday, 21 April 2018 <ul style="list-style-type: none"> 9.1.3. regulation of gene expression: Eukaryotes
Week 17 Chapter 10: Proteins
Week 17, Monday, 23 April 2018 <ul style="list-style-type: none"> 10.1.1. proteins: structure
Week 17, Tuesday, 24 April 2018 <ul style="list-style-type: none"> 10.1.2. proteins: classification
Week 17, Wednesday, 25 April 2018 <ul style="list-style-type: none"> 11.1.1. Extra nuclear genome: introduction
Week 17, Thursday, 26 April 2018 <ul style="list-style-type: none"> 11.2.1. chloroplast DNA
Week 17, Friday, 27 April 2018 <ul style="list-style-type: none"> 11.3.1. mitochondrial DNA
Week 17, Saturday, 28 April 2018 <ul style="list-style-type: none"> 11.3.1. Plasmid

Week 18

Chapter 10: assignments and unit test