

Université AboubekrBelkaid – Tlemcen
Faculté de Médecine- Dr. B. BENZERDJEB

جامعة أبو بكر بلقايد – تلمسان
كلية الطب د. ب. بن زرجب

Département de Pharmacie



قسم الصيدلة

PLANT BIOLOGY MODULE SYLLABUS

Academic year 2023/2024

Level: 1st year of pharmacy

Module : PLANT BIOLOGY P 106

Teaching coordinator: Mme. CHERIF Nassima (Maître assistante hospitalo-universitaire)

Participating teachers:

Permanent staff:

Mrs. CHERIF Nassima (Maître assistante hospitalo-universitaire)

Mrs. NEGADI Sihem (Maître assistante hospitalo-universitaire)

Mr. KAZI TANY Choukry (Maître de conférence classe A en Biologie)

Mrs BEKHECHI Chahrazed (Professeur en Biologie Faculté de biologie)

Temporary worker :

Mr. TABTI Mohammed (Assistant)

Mr Vacataire 2

Mr Vacataire 3

Start of lectures : January 7, 2024

Duration of teaching: 2nd and 3rd trimester

Forms of teaching:

Lectures : 2 sessions/week,

Tutorials: 3 in the 2nd quarter / 2 in the 3rd quarter

Practical work : 2 in the 2nd trimester / 3 in the 3rd trimester

Annual hourly volume:

Lectures : 40 :00

Tutorials: 07 : 30 (x 10 groups)

Practical work : 10 :00 (x 20 subgroups)

- **Lectures**

Objective: Acquire basic knowledge necessary for the description and identification of plants and for the phytochemical study of plants

Number of sections : 2

Total hourly volume : 46h00 x 2

Participating teachers:

Dr. NEGADI, Pr. KAZI TANY, Pr. BEKHECHI et Dr. CHERIF.

Lectures program by sessions:

CHAPTERS	PARTS
Introduction	Introduction to plant biology
ALGAE	Generalities Definition, vegetative system, reproductive system and reproduction, ecology and interest.
	Classification Green algae General characteristics, Classification, Development cycle, Pharmaceutical interest
	Red algae General characteristics, Development cycle, Pharmaceutical interest
	Brown algae General characteristics, Development cycle, Pharmaceutical interest
BRYOPHYTES	Generalities Definition, Vegetative apparatus, Reproduction (Vegetative multiplication and Sexual reproduction), Ecology and interest of Bryophytes
	Classification Marchantiophyta, Anthoceroophyta, Bryophyta
PTERIDOPHYTES	General characters Definition, vegetative system, reproductive system.
	Classification Development cycle Pharmaceutical interest
	Definition – Evolution - Vegetative apparatus
GYMNOSPERMS	Reproductive system
	Development cycle
	General and pharmaceutical interest

ANGIOPERMS	Introduction to Angiosperms Vegetative apparatus: Root
	Vegetative apparatus: stem
	Vegetative apparatus: Leaf
	Reproductive System: Inflorescences
	Reproductive System: Flower Receptacle Perianth
	Androecium
	Gynoecium
	Reproductive cycle
	Fruit and seeds
Growth hormones	Indole acetic acid, gibberellin, cytokinins, absissic acid
In vitro culture	Cell culture
PLANT BIOCHEMISTRY	Primary metabolites Carbohydrates
	Primary metabolites Lipids
	Primary metabolites Nitrogen compounds
	Secondary metabolites Gums and mucilages
	Secondary metabolites Phenolic compounds
	Secondary metabolites Terpenes
	Secondary metabolites Alkaloids

- **Tutorials**

Number of sessions: 5

Number of groups : 10

Total hourly volume : 07h30x 10

Participating teachers:

Permanent staff: : Dr. CHERIF, Dr. NEGADI, Pr. BEKHECHI

Temporary worker : Dr. TABTI

- **Practical work**

Number of sessions: 5

Number of subgroups: 20

Total hourly volume: 10h00 x 20 subgroups

Distribution of subgroups: 8 subgroups/week

Participating teachers:

Permanent staff: Dr. CHERIF, Dr. NEGADI,

Temporary worker: Dr. TABTI, Contractor 2, Contractor 3

BIBLIOGRAPHY

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- JC. ROLAND et F. ROLAND. 2008, Atlas de biologie végétale. Organisation des plantes sans fleurs .7ème édition révisée et augmentée. DUNOD. 142p
- Jean-claude LABERCHE, Biologie végétale 2eme édition. DUNOD 270 p
- J.ZAFFRAN.1998. Initiation à la biologie végétale. ELLIPSES
- M. Nabors 2009 Biologie végétale, édition Nouveaux Horizons.
- S. E. Eichorn, R.F Evert et P.H. Raven 2014 Biologie végétale, edition De Boeck
- S. Meyer, C. Reeb et R. Bosdeveix 2013. Botanique. Biologie et physiologie végétale, édition Maloine

Dr. CHERIF Nassima