Course Specifications

General Information

Course name	General Biology(1) lab
Course number	BIOL1103
Faculty	
Department	
Course type	College Needs
Course level	1
Credit hours (theoretical)	1
Credit hours (practical)	1
Course Prerequisites	

Course Objectives

1 - Safety in lab
2 - Commitment to laboratory standards
3 - Identification methodology of study in the lab and that will be different from lectures
4 - Identification biology courses by practical studies
5 - Identification theoretical subjects and concentration on the practical parts
6 - Improve work group skills for students

Intended Learning Outcomes

Knowledge and Understanding	* Distribution of students in groups
	* Identification and usage of tools and equipment with right methodologies
	* Usage of light microscope in a mastery way for examined samples
	* Students must be cautious from used chemicals and equipment
Intellectual Skills	* Selection proper tools for each test
	* Enabling students to do microscoping examination of samples according to magnification power
	* Ability to diagnostic and knowledge the cells and tissue using microscope
	* Students must be cautious from used chemicals and equipment of experiment
	* Ability for reading and analysis results
Professional Skills	* Usage of light microscope
	* Identification of magnification power of samples
	* Mastery working of plant and animal slides
	* Conducting of biochemistry tests and appearing results
	* Dealing with tools and equipment in cautious way
General Skill	* Systematic scientific thinking to study in the laboratory
	* Comparison between results of experiments
	* Presentation and analysis of results

Course Contents

1 - Safety in laboratory
2 - Introduction , microscope , and metric system (weight, volume, length, temperature)
3 - Plant tissues (slides)
4 - Types of animal tissues (slide)
5 - Identification of macromolecules "carbohydrates, lipids, protein" using general tests
6 - Microscopical examination of different types of microorganisms (bacteria, fungi, algae, protozoa)
7 - Experiments on diffusion, osmosis showing cell membrane integrity.
8 - Cell division slides for meiosis and mitosis

Teaching and Learning Methods

1 - Theoretical explanation for experiments
2 - Microscopic examination of cells and tissues
3 - Conducting experiments practically
4 - Reading, analysis and discussion of results
5 - Report writing for experiments
6 - Discussion of results

Teaching and Learning Methods for the Disabled Students

1 - Preparing the lab with required equipment, tools and techniques proper to disabled students

Students Assessment

Assessment Method	TIME	MARKS
Mid-term exam	1Hour	30
Attendance and reports		10
Final exam	1Hour	40
Assessment		20

Books and References

Course note	Practical general biology note
Other References (Periodical, web sites, ... etc.)	Webs related to general biology