

116 بيولوجيا الخلية نسج  
Cell Biology HIS 116

اسم و رمز المقرر باللغة العربية:  
اسم و رمز المقرر باللغة الإنجليزية:

**Credit hours/ week: 3 hours**

**Course Description:** the course covers the main specific topics concerning the structure and functions of cell organelles.

**Course Objective:**

1. Acquaint the student with the function of the living cell and principles genetics.

**Course Contents:**

Cell types, size and shapes, chemical constituents of living cell, structure of cell organelles, structure and function of cell membranes, transport mechanisms across cell membranes, cell cycle and cell division, structure and function of nucleic acids, genetic code, Mendel's First and Second laws of inheritance.

**Course Outcomes:**

By the end of this course the student should be able to:

1. Differentiate between eukaryotic and prokaryotic cell.
2. Be familiar with structure and function of cell organelles.
3. Understand cell cycle and cell division.
4. Discuss transport mechanisms across cell membranes.
5. Be familiar with basic principles of genetics.

**Teaching Methods:**

1. Lectures
2. Practical lessons
3. Seminars

**Course Assessment:**

1. Tests and assignments
2. Practical performance
3. Final examination (written and practical examination)

**References:**

1. Thomas D. P. and William C. E. (2002). Cell Biology. 1<sup>st</sup> edition. Saunders.
2. Steven R. G. (2007). Medical Cell Biology. 3<sup>rd</sup> edition. Academic Press.
3. Thomas D. P. and William C. E. (2007) .Cell Biology. 2<sup>nd</sup> edition. FRSE, Jennifer Lippincott- Schwartz.
4. Bruce A., Dennis B., Karen H., Alexander D. J. and Julian L. (2013). Essential Cell Biology. 4<sup>th</sup> edition. Taylor and Francis Publishers.