

## CLS 441- Immunohaematology

### Course Description

This course aims to equip the student with the skills and knowledge required for proficiency in the safe supply of human blood products. The first two lectures focus on the fundamentals of immunology that are relevant to this course. Then, a series of lectures that discuss blood groups will follow. The student will then be introduced to some of the basic concepts of donation, and component collection, preservation, and storage. The final lectures will focus on adverse effects of blood transfusion and hemolytic anemias.

### Lectures outline:

Week	Subject
1	Introduction to the course + Introduction to Immunohaematology
2	Antibody-Antigen reactions
3	ABO blood group system
4	Rh blood group system
5	Other blood group systems
6	Antihuman globulin test (AHG)
7	<i>Midterm exam</i>
8	Donor selection and screening
9	Blood components
10	Cross matching (compatibility testing)
11	Adverse effects of transfusion (immunological reactions)
12	Adverse effects of transfusion (Transfusion Transmitted Infections)
13	Haemolytic Disease of the Newborn and fetus (HDN)
14	Autoimmune Haemolytic Anemia (AIHA)

### Assessment:

Midterm examination: 20

Midterm practical examination: 20

Final practical examination: 20

Final Theoretical examination: 40

**References:**

**Harmening DM. Modern blood banking and transfusion practices. 5th ed. Philadelphia: FA Davis, 2005.**

**Overfield J, Dawson M, and Hamer D. Transfusion Science. 2<sup>nd</sup> ed. Scion Publishing Ltd. Oxfordshire. 2008.**