



KAMPALA  
INTERNATIONAL  
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Course File: Form 02

FACULTY OF CLINICAL MEDICINE AND DENTISTRY

KAMPALA INTERNATIONAL UNIVERSITY

FACULTY OF CLINICAL MEDICINE AND DENTISTRY

DEPARTMENT OF PATHOLOGY

COURSE TITLE: HAEMATOLOGY AND BLOOD TRANSFUSION

BMS-215/BCM- 223 PATHOLOGY JUNE 2025- DECEMBER 2025

LECTURERS NAMES: - PROF IBANGA IQUO –Tel: +256 757384081

- DR. SURAT AKIB - Tel: +256 752574699

- DR.HABAYEB ABDALLATEEF OMER Tel: +256 779537554

SHIFT – DAY

Year [2025/2026]

**COURSE OBJECTIVES:**

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

1. Describe the formation and maturation sequence of each cell of the haemopoietic system including their regulatory mechanisms and know the normal ranges for blood cell counts.
2. Describe the roles of iron, vitamin B12 and folic acid in red cell development.
3. Discuss the structural and functional properties of the haemoglobin molecule, the genetics, clinical features and management of the common haemoglobinopathies.
4. Define anaemia in different ways.
5. Discuss the classification of the anaemias and the deficiencies of the haematinics in detail
6. Evaluate and outline the management of other red cell abnormalities.
7. Discuss the lymphoreticular system in terms of the structure and function of the spleen and its disorders.
8. Describe normal and abnormal haemostasis and be able to do the laboratory evaluation.
9. Discuss the neoplastic haematological disorders and outline the principles of their management.
10. Describe major blood groups, blood group serology and the principles behind transfusion of blood and its products.
11. Perform simple laboratory investigations in haematology and blood transfusion.



FACULTY OF CLINICAL MEDICINE AND DENTISTRY

MODE OF DELIVERY

E. Learning / Tutorials/ Practicals/ Role-plays and simulation sessions/Student presentations/Directed and independent self-study/  
Essay writing

STUDENTS ASSESSMENT

1. Continuous assessment tests may comprise of MCQs, short essays, Random assessment tests, tutorials, practicals (40%)
2. End of course examination- MCQ, short essays (50%)
3. Viva Voce (10%)

| WEEK OF SEMESTER | DATE              | TOPICS   | LECTURERS                   | MAIN REFERENCE  | ADDITIONAL LITERATURE   |
|------------------|-------------------|--|-----------------------------|---|---|
| Week 1           | 30/06-04/07/ 2025 | A. NORMAL HAEMATOLOGY<br>1. Introduction to Haematology<br>2. Haemopoiesis<br>3. Haemoglobin-Structure & Function<br>4. Normal blood ranges/Red cell Indices                 | Dr. AKIB                    | Hoffbrand's Essential Haematology<br>A. Victor Hoffbrand , David P. Steensma<br>8th Edition | Clinical Hematology Atlas Bernadette F. Rodak, Jacqueline H. Carr<br>6th Edition                                    |
| Week 2           | 07 -11/07/ 2025   | 5.Anticoagulants/ stains used in the laboratory/<br>Transport of Blood Specimens/Processing Times for Blood<br><br>6. Normal Haemostasis<br>7. Tests of Haemostatic Function | DR. AKIB<br><br>PROF IBANGA |   | Dacie and Lewis Practical Haematology Barbara Jane Bain , Imelda Bates , Mike A. Laffan<br>12 <sup>th</sup> Edition |



FACULTY OF CLINICAL MEDICINE AND DENTISTRY

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|--------|--------------------|---|--------------------------------------|--|---|
| Week 3 | 14 - 18/07/ 2025   | B. HAEMATOLOGICAL DISORDERS<br>1. Definition and Classification of Anaemia<br>2. Compensatory mechanisms in Anaemia<br>3. Abnormal red cell shapes/ Red cell Inclusions | DR AKIB                              |  | Oxford Handbook of Clinical Haematology<br>Drew Provan, Trevor Baglin Inderjeet Dokal , Johannes de Vos 4th Revised edition                     |
| Week 4 | 21 -25 /07/2025    | 4. Disorders of iron<br>- Iron Metabolism<br>- Iron deficiency Anaemia<br>- Sideroblastic anaemia<br>- Iron Overload<br>- Haemochromatosis<br>- Haemosiderosis          | DR HABAYEB                           |  | Haematology<br>Chris S. R. Hatton , Nevin C. Hughes-Jones , Deborah Hay , David Keeling<br>9th Revised edition                                  |
| Week 5 | 28/07 – 01/08/2025 | 5. Megaloblastic Anaemias<br>-Vitamin B12 deficiency<br>- Folic acid deficiency   | DR HABAYEB                           |  | Hutchison's Clinical Methods: An Integrated Approach to Clinical Practice Michael Glynn MA MD FRCP FHEA, (M Drake DM } 24 <sup>th</sup> edition |
| Week 6 | 04 -08/08/2025     | TUTORIALS SET 1   | PROF IBANGA<br>DR HABAYEB<br>DR AKIB |  | Davidson's Principles and Practice of Medicine: Mark W.J. Strachan, Nicki R Colledge, Stuart H. Ralston   |



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|         |                 |   |                                      |  | 24 <sup>th</sup> Edition |
|---------|-----------------|---|--------------------------------------|--|--------------------------|
| Week 7  | 11 -15/08/2025  | . 6. Haemolytic Anaemias <ul style="list-style-type: none"><li>- G6PD deficiency</li><li>- Pyruvate kinase deficiency</li><li>- Hereditary Spherocytosis</li><li>- PNH</li><li>- Sickle Cell Diseases</li></ul>   | PROF IBANGA                          |  |                          |
| Week 8  | 18 -22/08/ 2025 | -Thalassaemias <ul style="list-style-type: none"><li>- Autoimmune Haemolytic anaemia</li></ul>  | PROF IBANGA                          |  |                          |
| Week 9  | 25 -29/08/ 2025 | 7. Anaemia of Bone Marrow Failure <ul style="list-style-type: none"><li>8. Disorders of the spleen<ul style="list-style-type: none"><li>-Asplenia</li><li>- Hypersplenism</li><li>-Tropical Splenomegaly Syndrome</li></ul></li></ul>   | DR HABAYEB                           |  |                          |
| Week 10 | 01 -05/09/ 2025 | PRACTICALS 1  | PROF IBANGA<br>DR HABAYEB<br>DR AKIB |  |                          |
| Week 11 | 08 -12/09/ 2025 | CAT WEEK  |                                      |  |                          |
| Week 12 | 15 -19/09/2025  | C. HAEMOSTATIC DISORDERS <ul style="list-style-type: none"><li>1. Disorders of Haemostasis<ul style="list-style-type: none"><li>- Platelet Disorders</li><li>- ITP, TTP, HUS</li><li>-Vascular Disorders</li><li>- Coagulation Disorders<ul style="list-style-type: none"><li>- Congenital</li><li>- Haemophilia</li><li>- Von Willebrand</li></ul></li></ul></li></ul> | PROF IBANGA                          |  |                          |



FACULTY OF CLINICAL MEDICINE AND DENTISTRY

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|---------|--------------------|--|-------------|--|--|
| Week 13 | 22- 26/09/ 2025    | <ul style="list-style-type: none"><li>- Acquired<ul style="list-style-type: none"><li>- Anticoagulant overdose</li><li>- DIC,</li><li>- Vitamin K deficiency</li><li>- Liver Disease</li></ul></li><br/><li>2. Thrombosis and Anticoagulation</li></ul>  | PROF IBANGA |  |  |
| Week 14 | 29/09- 03/10/ 2025 | <b>D. NEOPLASTIC DISORDERS</b> <ul style="list-style-type: none"><li>1. Lymphomas<ul style="list-style-type: none"><li>-Hodgkins Lymphoma</li><li>-Non Hodgkins Lymphoma</li><li>- Burkitts Lymphoma</li></ul></li><br/><li>2. Multiple Myeloma</li></ul>  | DR HABAYEB  |  |  |
| Week 15 | 06 -10/10/2025     | <ul style="list-style-type: none"><li>3. Leukaemias<ul style="list-style-type: none"><li>- Acute Leukaemias</li><li>- Chronic Leukaemia</li></ul></li><br/><li>4. Myeloproliferative Disorders<ul style="list-style-type: none"><li>- Polycythaemia</li><li>- Essential Thrombocythaemia</li><li>- Myelofibrosis</li></ul></li></ul> | DR HABAYEB  |  |  |
| Week 16 | 13- 17/10/ 2025    | <b>E. BLOOD TRANSFUSION</b> <ul style="list-style-type: none"><li>1. Red Blood Cell Antigens</li><li>2. Blood Donation</li><li>3. Blood Component Therapy</li><li>4. Blood Preservation/<br/>Pre- Transfusion Tests</li></ul>  | DR AKIB     |  |  |
| Week 17 | 20- 24/10/ 2025    | <ul style="list-style-type: none"><li>5. Red Blood Cell Antibodies</li><li>6. Haemolytic Disease of the<br/>Newborn</li><br/><li>7. Complications of Blood</li></ul>   | DR AKIB     |  |  |



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|---------------------|--------------------------|--|--------------------------------------|--|--|
|                     |                          | Transfusion<br>8. Bone marrow transplant |                                      |  |  |
| Week 18             | 27/10- 01/11/ 2025       | PRACTICALS                               | PROF IBANGA<br>DR HABAYEB<br>DR AKIB |  |  |
| Week 19             | 03- 07/11/ 20            | TUTORIALS SET 2                          | PROF IBANGA<br>DR HABAYEB<br>DR AKIB |  |  |
| Week 20             | 10- 14/11/ 2025          | TUTORIALS SET 3                          | PROF IBANGA<br>DR HABAYEB<br>DR AKIB |  |  |
| Week 21             | 17- 21/11/2025           | REVISION WEEK                            |                                      |  |  |
| Week 22-<br>Week 23 | 24/11/2025-<br>5/12/2025 | PATHOLOGY EXAMS                          | PROF IBANGA<br>DR HABAYEB<br>DR AKIB |  |  |