

CLS 291 Clinical Hematology 1

جامعة
الملك سعود
King Saud University



Introduction to Clinical Hematology Lab

Outline

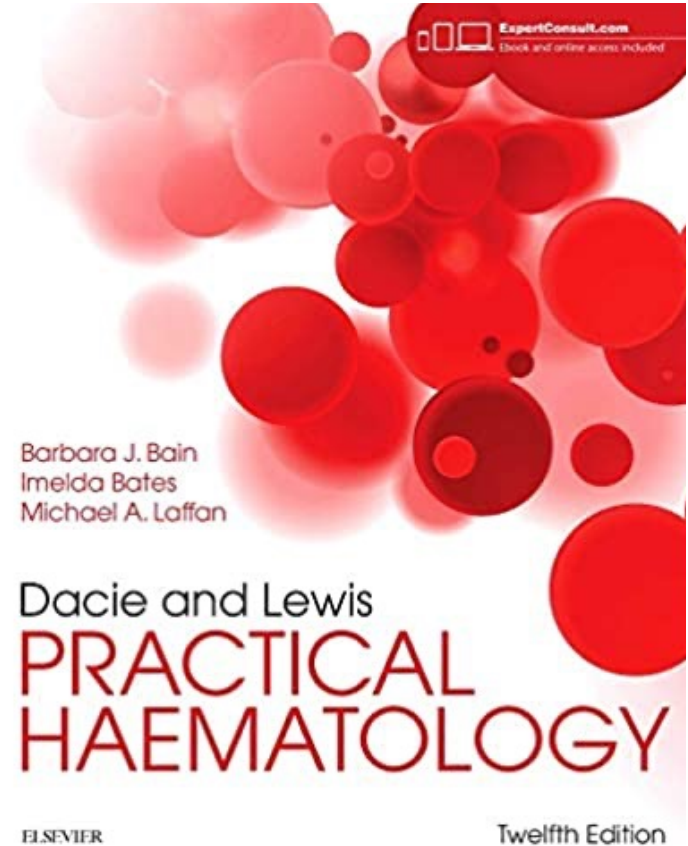
- I. Objectives
- II. Reference
- III. Marks Distribution
- IV. Biohazard precautions and Laboratory safety.

Objectives

- I. To be able to set up and use the microscope properly.
- II. Carry out blood film preparation and staining procedure.
- III. Distinguish between normal and abnormal cells Red Blood Cells.
- IV. Interpret peripheral blood film.
- V. Perform basic manual hematological tests.
- VI. Discuss and interpret the test result.
- VII. Develop basic laboratory skills such as pipetting.
- VIII. Detect experimental errors and troubleshoot your results.
- IX. Show a good attitude by following laboratory guidelines and instructions and working in a team.

Reference

- Dacie and Lewis Practical Hematology.
- You can be downloaded from the Saudi digital library (SDL).

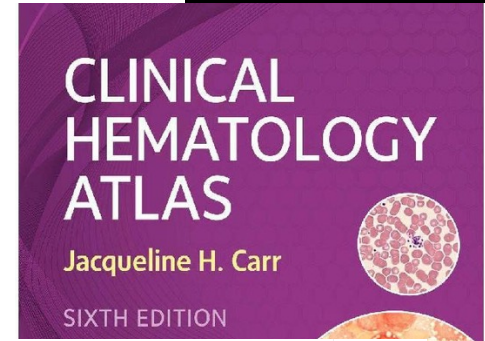
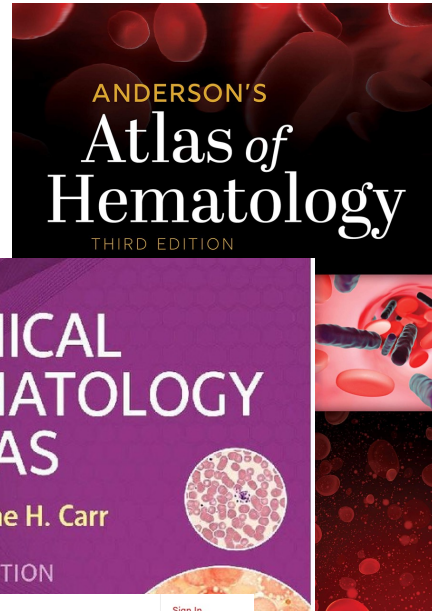


Additional materials

- ANDERSON'S Atlas of Hematology.
- Clinical Hematology Atlas.
- ASH Image Bank.

<https://imagebank.hematology.org/atlas-images>

- Atlas of hematology includes color illustrations and clear descriptions of normal and abnormal blood films that will help you to practice blood film interpretation.



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All (86) Morphologic variants of normal cells (59) Normal cells (7)

View by III Sort by Latest to oldest

Total records: 27 Download

To download multiple images please select individual images and then click on download images link (max 12 images can be selected).

Category

All categories

- Morphologic variants of normal cells (59)
 - Morphologic variants of white blood cells (24)
 - Morphologic variants of platelets/megakaryocytes (5)
 - Morphologic variants of Red Blood Cells/precursors (27)
 - Erythroid Precursors (7)
 - Normal Red blood cell morphology with resting lymphocyte for

Marks Distribution

Assessment	Marks
<i>Lab performance:</i> <ul style="list-style-type: none">- <i>Following safety instruction</i>- <i>Involve in lab discussion</i>- <i>Correctly performing the lab Experiment</i>- <i>Writing your result and discussing them with the demonstrator</i>- <i>Cleaning your bench and returning all equipment before leaving the lab</i> <i>see the Laboratory Evaluation Rubric for more details</i>	5*
<i>Midterm</i>	10
<i>Final practical exam</i>	20

Total marks= 35

* Absent students will lose the mark.

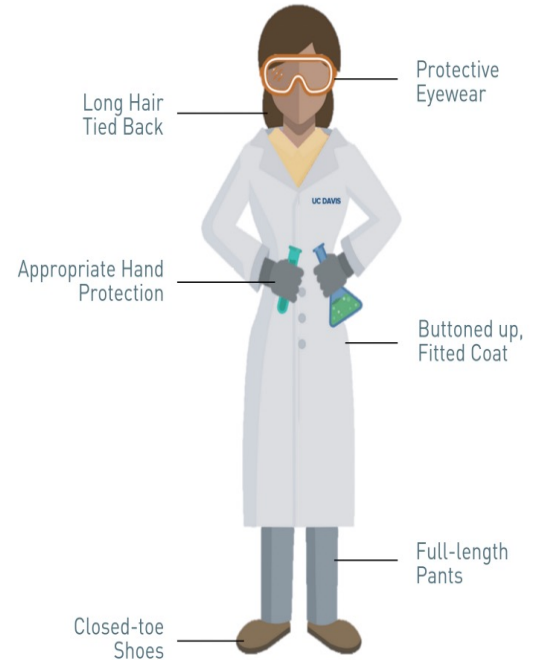
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Biohazard precautions and lab safety

1. Eating, drinking, and storage of food and beverages are not permitted in laboratories.
2. Lab coats (knee length), gloves, and safety glasses are required in laboratories employing chemicals and biohazards.
3. Hair should be tied back.
4. Keep your bags and personal stuff away from the bench area.
5. Closed shoes and pants are mandatory.
6. Cover any skin injury before handling biohazard material.



Biohazard precautions and lab safety

7. Workplaces must be clean and free of unwanted chemicals, biological specimens, and idle equipment.
8. Be familiar with the locations and operation of safety and emergency facilities such as fire extinguishers, first aid kits, emergency wash facilities, fire alarm pull stations, telephone, and emergency exits.
9. Sharp objects (syringe needles, broken glass, blades, etc.) should be placed in a rigid container.
10. Materials contaminated with biohazardous agents should be disposed in the yellow bag.
11. Clean your bench area and return everything as it was before you used it.
12. Wash hands before leaving the laboratory.



World Health Organization

Patient Safety
A World Alliance for Safer Health Care

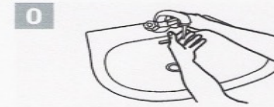
SAVE LIVES
Clean Your Hands

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this document. However, the published information is being provided as a general guide only and does not constitute a recommendation. The World Health Organization is not responsible for any damage or liability arising from the use of the information contained in this document. The World Health Organization is a member of the International Coalition Programme for Hand Hygiene Promotion in Health Care Facilities (ICHPH), to facilitate the members of the International Coalition Programme, to their active participation in developing this material.

How to Handwash?

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

Duration of the entire procedure: 40-60 seconds



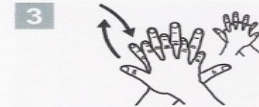
Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



Right palm over left dorsum with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



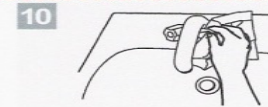
Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



Rinse hands with water;



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



Your hands are now safe.

Hand Hygiene