

The Hebrew University of Jerusalem

Syllabus

PHARMACEUTICAL TECHNOLOGIES B - 64616

Last update 11-10-2018

HU Credits: 2

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: School of Pharmacy

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator: Arie Mousaieff

Coordinator Email: ariehm@ekmd.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

Dr. ArieH Moussaieff

Course/Module description:
Semi-solid Systems

- Skin structure
- Skin cells
- Dosage forms applied to the skin: topical effect
- Definitions: ointment, cream, gel
- Mechanism of action: emollients, protective
- Medicated semisolids for topical effect
- Semisolid base hydrophilicity
- Relationship between ointment bases and creams
- Hydrocarbon and oleaginous bases
- Absorption ointment bases
- Washable ointment bases – emulsifying ointments
- Emulsion bases:
 - w/o emulsion bases
 - o/w removable creams
- Washable ointment bases – PEG soluble ointments
- Hydrophilic gels
- Pastes
- Novel Technologies for dermal and transdermal delivery systems

Suppositories

- Therapeutic uses
- Suppository bases

soaps

Course/Module aims:

Learning outcomes - On successful completion of this module, students should be able to:

make semi solid drugs

Attendance requirements(%):

Teaching arrangement and method of instruction:

Course/Module Content:

Skin structure

- *Skin cells*
- *Dosage forms applied to the skin: topical effect*
- *Definitions: ointment, cream, gel*
- *Mechanism of action: emollients, protective*
- *Medicated semisolids for topical effect*
- *Semisolid base hydrophilicity*
- *Relationship between ointment bases and creams*
- *Hydrocarbon and oleaginous bases*
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- *Washable ointment bases – emulsifying ointments*
- *Emulsion bases:*
 - w/o emulsion bases
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- *Washable ointment bases – PEG soluble ointments*
- *Hydrophilic gels*
- *Pastes*
- *Novel Technologies for dermal and transdermal delivery systems*

Suppositories

- *Therapeutic uses*
- *Suppository bases*

Required Reading:

N/A

Additional Reading Material:

Course/Module evaluation:

End of year written/oral examination 40 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 0 %

Reports 0 %

Research project 0 %

Quizzes 60 %

Other 0 %

Additional information: