

# The Hebrew University of Jerusalem

Syllabus

Spider silk: From basic science to technology - 94902

Last update 10-09-2019

HU Credits: 2

<u>Degree/Cycle:</u> 2nd degree (Master)

Responsible Department: Biotechnology

Academic year: 0

Semester: 1st Semester

<u>Teaching Languages:</u> Hebrew

Campus: Ein Karem

Course/Module Coordinator: Dr. Shmulik ittah

Coordinator Email: shmulik.ittah@gmail.com

Coordinator Office Hours:

Teaching Staff:

#### Dr. Shmulik Ittah

# Course/Module description:

During the course we will learn about the field of spider silk, starting with background and basic science and ending with a company that sell and develop different products that contains spider silk.

#### Course/Module aims:

Providing an overall perspective on the process of transforming basic science into a biotech company.

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

To understand the spider silk field, as well as to assess different stages in the process of transforming basic science into technology.

# <u>Attendance requirements(%):</u>

Teaching arrangement and method of instruction: Lectures

#### Course/Module Content:

In context with spider silk:

Background, DNA, genes, protein expression, bacoluvirus, self-assembly, structural biology, computational biology, protein purification, QA, QC, microscopy, IP, GLP, composite materials, product development.

### Required Reading:

No need

### Additional Reading Material:

<u>Course/Module evaluation:</u> End of year written/oral examination 100 % Presentation 0 % Participation in Tutorials 0 % Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

# Additional information: