**Virology**
Thursday 13:00-16:00 @ KMB213A
Instructor: Assist.Prof.Dr. Alper Yilmaz
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Office Hours: by appointment
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## Course Goals

In this course, you will:

1. Learn complexity and diversity of viruses.

2. Learn that viruses help understand cellular mechanisms and they excelled at many aspects (e.g. trafficking).

3. Understand that viruses hack the system (i.e. cell) and usually use a workarounds, **even by overriding dogmas**, to tackle with various barriers.

## Course Materials

Course textbook(s) are *Virology: Principles and Applications* by John Carter and Venetia Saunders (2007). In addition we might refer to another book, *Fundamentals of Molecular Virology* by Nicholas Acheson (2011).

Lecture notes are handed in copy center across our department. PDF versions of lecture slides can be downloaded from AVESIS page.

Lecture notes contain mostly pics with sparse text, thus you need to listen the instructor and take notes.

## Grading

Your grade will come from the following sources:

- Midterm: 40%
- Final: 40%
- Quiz: 0%
- Assignment: 10%
- Attendance: 10%

WHAT DID WE COVER IN CLASS LAST WEEK?

IT'S IN THE SYLLABUS.

WHAT'S YOUR LATE HOMEWORK POLICY?

IT'S IN THE SYLLABUS.

WHEN ARE YOUR OFFICE HOURS?

IT'S IN THE SYLLABUS.

HOW WILL MY GRADE BE COMPUTED?

IT'S IN THE SYLLABUS

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IT'S IN THE SYLLABUS

This message brought to you by every instructor that ever lived.
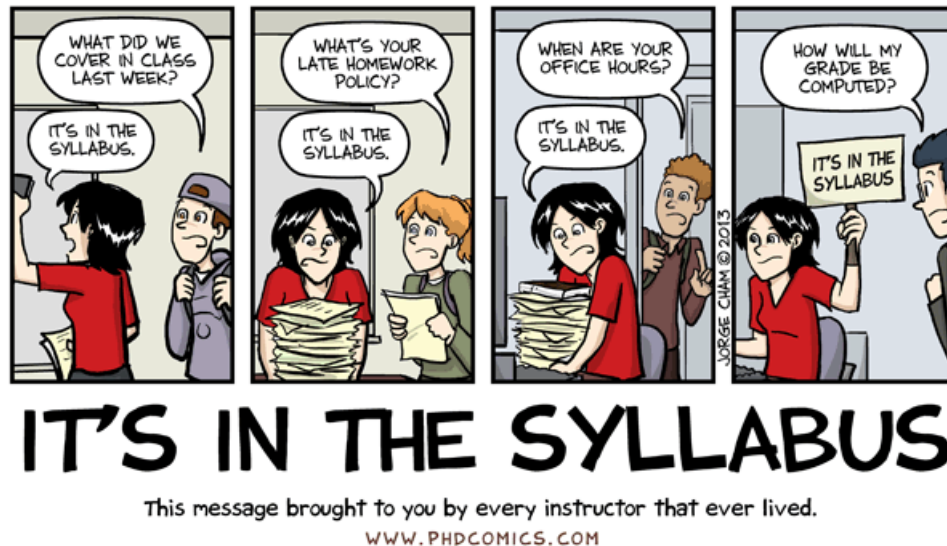
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Figure 1: Please read the syllabus

There will be 4 quizzes and 3 highest scores will be considered. If you attend all lectures or miss only one lecture then you'll get 5 points. For every 1-2 lectures missed you'll lose 1 point. **Note:** due to overcrowded classroom, there won't be any quizzes this year.

**Final exam will cover topics discussed after Midterm exam.**

Number and content of assignments will be provided later. The assignments will be related to "applications of a given virus to bioengineering problems".

Midterm and Final results are announced at "AVESIS Announcements" page, if you think there's mistake or problem with your score please contact the instructor in order to go over your exam results. At the end of the semester, all your exam scores and total score will be published along with letter ranges. If your total score is very close to boundary please contact the instructor and he would try to help in that matter.

## Communication

I'm trying to respond emails as quickly as possible. If you don't get a response within 1-2 days please don't hesitate to send a reminder email.

The changes pertaining to exam date, time and assignment due dates should be decided in class after discussing with everybody. Please don't ask for changes individually, otherwise notification of whole class becomes a hassle.

## Manners

Since you're considered adult, it's your responsibility and decision to listen to the class or not. You can either pay attention and participate in class OR pay no attention and be busy with your cellphone or homework or lab report of another course. Your poor decision should be affecting only you. If you start and keep talking during class, keep instructor and classmates distracted then it will be regarded as an **insult** and acted accordingly.

## Schedule

Below is the tentative schedule for the course. Depending on the speed we go through topics there might be shifts in the schedule. **NOTE :** The midterm date is just a forecast, so **the midterm will take place on the date and time the department announces**.

### February 4. Introduction

Introduction to virology and various fields related to virology. Overview of complexity and diversity of viruses, their genomes an proteins. Main differences between enveloped and non-enveloped viruses.

### February 11. Methods Used in Virology & Virus Structure

*Chapter 2* and *Chapter 3* in our textbook.

### Mechanisms

### February 18. Attachment, Entry, Translation and Transport

*Chapter 5* and *Chapter 6* in our textbook.

### February 25. Virus Genome Replication & Assembly and Exit

*Chapter 7* and *Chapter 8* in our textbook.

### March 3. Classification and Nomenclature of Viruses

*Chapter 10* in our textbook.

### Individual Virus Families

### March 10. Herpesviruses and Other dsDNA Viruses

*Chapter 11* in our textbook.

**March 17. Parvoviruses and Other ssDNA Viruses**

*Chapter 12* in our textbook.

*(March 24). Midterm*

**April 31. Reoviruses and Other dsRNA Viruses**

*Chapter 13* in our textbook.

**May 7. Picornaviruses and Other Plus-strand RNA Viruses**

*Chapter 14* in our textbook.

**May 14. Rhabdoviruses and Other Minus-strand RNA Viruses**

*Chapter 15* in our textbook.

*May 21. No classes*

*Chapter 16* and *Chapter 17* in our textbook.

**May 28. Retroviruses & HIV**

*Chapter 16* and *Chapter 17* in our textbook.

**June 5. Hepadnaviruses and Other Reverse-transcribing DNA Viruses**

*Chapter 18* in our textbook

# Acknowledgments

Last revised 2019-10-02