Textbook: There is no text book for the course. Students shall be provided with the lecture notes and other relevant materials to study at F:\COURSES\UGRADS\SCIE\SCIE103\SHARE

Course content
1. Why study science & scientific methodology?
2. What is biology & life around you?
3. Biodiversity, threats to biodiversity & effects of human exercise on planet Earth
4. Classification of organisms
   a. Kingdoms
   b. Symbiosis
5. The conceptual framework of biology & evolution of the Universe
   a. Cosmic evolution
   b. Relativity
   c. Big Bang Theory
   d. Evolution of Galaxies
   e. Evolution of Stars
   f. Evolution of Planets
6. Evolution of Earth
   a. Plate tectonics
7. Evolution of Life on Earth
   a. Chemical basis of Evolution
   b. Evolutionary biology
   c. Eugenics
8. Chemistry of life?
   a. Elements, molecules, forces
9. Basic molecules of life
   a. Carbohydrates
   b. Lipids
   c. Nucleic Acids
      i. Structure of DNA
      ii. DNA replication
   d. Proteins
      i. Central dogma of biology
         1. Protein synthesis
         2. Mutations
   e. Vitamins
10. Cells
    a. Cell types: Prokaryotes & eukaryotes
    b. Cell structure and organelles
11. Energy
    a. Glycolysis
    b. Respiration
       i. Anaerobic respiration
       ii. Aerobic respiration
12. Photosynthesis
13. Cell division
    a. Prokaryotic Cell Division
b. Eukaryotic Cell Division
   i. Cell cycle regulation
   ii. Cancer
   iii. Mitosis & meiosis
14. Control of the cellular functions
   a. Gene expression
15. Genetics & heredity
   a. Mendelian Genetics
      i. Single gene inheritance
      ii. Multi gene inheritance
      iii. Sex linked inheritance
   b. Genetic diseases
   c. Blood groups
16. Developments in Biotechnology and their applications
   a. Tools of the trade
   b. Cloning
   c. Forensic applications
      i. DNA Fingerprinting
   d. Gene therapy
   e. Human Genome Project
17. Viruses and other nonliving infectious agents
   a. HIV & AIDS
   b. Prions
   c. Viroids
18. Human defense system (Immunology)
   a. Inside the living body

Problem Session and Laboratory Coordinator  Nazmi Yılmaz
Office: Science building room 136 - Tel: 1726
E-mail: nayilmaz@ku.edu.tr

Laboratory  6 biweekly laboratory sessions alternating with problem sessions
Laboratory: SCI 278
DS Classrooms: to be announced

Discussion Sessions  6 discussion sessions followed by 6 quizzes

Attendance  Missing more than 9 lectures totally disqualifies you for the 5% attendance bonus

Grading

<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid-Term 1</td>
<td>Week of 14 March 2011</td>
<td>20%</td>
</tr>
<tr>
<td>Mid-Term 2</td>
<td>Week of 25 April 2011</td>
<td>25%</td>
</tr>
<tr>
<td>Laboratory performance</td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>DS performance</td>
<td></td>
<td>3%</td>
</tr>
<tr>
<td>Attendance</td>
<td></td>
<td>5%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30 May-12 June 2011</td>
<td>35%</td>
</tr>
</tbody>
</table>

You may check your in-semester progress from KUAIS
INFORMATION ABOUT LABORATORIES

Science 100 lectures are accompanied by Discussion Sessions (DS) and Laboratory Work (Lab).

During the FIRST week of classes, students in Lab-DS sections a, b, c, d, e, f, must go to their DS rooms (Please check your DS room in KUAIS) and students in sections g, h, i, j, k, l, must go to the Physics Laboratory (Med 278) at their scheduled Lab-DS period for a mandatory laboratory orientation.

6 Laboratory experiments will be performed during the semester. The master copies of the experiment sheets will be available at DEMP A (ÖM-2) and Laboratory notebooks will be available at the bookstore. Laboratory sessions will be held in the Physics Laboratory, Med 278.

6 Discussion Sessions will be held for all Science 100 students. During these sessions, there will be film shows, discussions, and quizzes about the session realized.

It is compulsory to attend the Laboratories. Each missed lab session, without a legitimate excuse accepted by the university, results in a reduction of your final course grade by one notch. A grade of at least 60% is required in Lab to pass the course, regardless of your performance in the rest of the course.

Whenever you have an excuse for the missing lab, you have to contact Nazmi Yılmaz (nayilmaz@ku.edu.tr) within 3 days and provide the relevant documents in order to arrange a make-up session. It is your responsibility to ask for a lab make-up appointment. Late requests for make-ups will not be taken into consideration. No make-ups will be given for Discussion Session Quizzes.
# Scie 10X Lab/DS Schedule Spring 2011

<table>
<thead>
<tr>
<th>Week</th>
<th>Lab/DS Sections a, b, c, d, e, f</th>
<th>Lab/DS Sections g, h, i, j, k, l</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feb.17-18 Lab Orientation (Check your room in KUAIS)</td>
<td>Lab Orientation (in MED 278)</td>
</tr>
<tr>
<td>2</td>
<td>Feb.24-25 DS1- BBC Horizon- Most of Our Universe is Missing</td>
<td>Lab1- Light and Colour</td>
</tr>
<tr>
<td>3</td>
<td>Mar.03-04 Lab1- Light and Colour</td>
<td>DS1- BBC Horizon- Most of Our Universe is Missing</td>
</tr>
<tr>
<td>4</td>
<td>Mar.10-11 DS2 - BBC Horizon-Hawking Paradox</td>
<td>Lab2 - Simple Pendulum-Gravity Measurement</td>
</tr>
<tr>
<td>5</td>
<td>Mar.17-18 Lab2 - Simple Pendulum-Gravity Measurement</td>
<td>DS2 - BBC Horizon-Hawking Paradox</td>
</tr>
<tr>
<td>6</td>
<td>Mar.24-25 DS3 - Global Warming by Al Gore</td>
<td>Lab3- Global warming: Green House Experiment</td>
</tr>
<tr>
<td>7</td>
<td>Mar 31-Apr.01 Lab3- Global warming: Green House Experiment</td>
<td>DS3 - Global Warming by Al Gore</td>
</tr>
<tr>
<td>8</td>
<td>Apr.07-08 Spring Break</td>
<td>Spring Break</td>
</tr>
<tr>
<td>9</td>
<td>Apr.14-15 DS4 - BBC Horizon- Nice Guys Finish First</td>
<td>Lab4 - Shampoo Evaluation</td>
</tr>
<tr>
<td>10</td>
<td>Apr.21-22 Lab4 - Shampoo Evaluation</td>
<td>DS4 - BBC Horizon- Nice Guys Finish First</td>
</tr>
<tr>
<td>11</td>
<td>Apr.28-29 DS5 - BBC Horizon-Human V2</td>
<td>Lab5 - Protein Structure-Molecular Models</td>
</tr>
<tr>
<td>12</td>
<td>May.05-06 Lab5 - Protein Structure-Molecular Models</td>
<td>DS5 - BBC Horizon-Human V2</td>
</tr>
<tr>
<td>13</td>
<td>May.12-13 DS6 - Living Planet Disk 4 - Making New Worlds</td>
<td>Lab6 - Photosynthesis</td>
</tr>
<tr>
<td>14</td>
<td>May.19-20 No DS-Lab</td>
<td>No DS-Lab</td>
</tr>
<tr>
<td>15</td>
<td>May.26-27 Lab6 - Photosynthesis</td>
<td>DS6 - Living Planet Disk 4 - Making New Worlds</td>
</tr>
</tbody>
</table>
The Academic Grievance Procedure of Koç University has been established to help students in resolving their complaints relating to academic matters. The procedure should be started within two weeks after the student becomes aware of a faculty member’s, or an instructor’s decision, act, or omission that might have negatively affected his/her academic performance or experience.

- A student who has an academic grievance claim against a faculty member or an instructor must first try to discuss the issue with the individual faculty member or instructor involved.

- If the student fails to satisfactorily resolve the issue with the individual faculty member or instructor involved, he/she may submit a written request to the Dean’s Office of his/her College. The student is expected to report, in writing, the matter as he/she perceives it, the specific remedy he/she seeks, and the response of the faculty member or instructor within one week after he/she receives the final response of the faculty member or instructor.

The Dean may consult with the student, the faculty member or instructor involved, and other faculty members, separately, or, if all parties agree, jointly to resolve the issue.

The Dean is expected to inform the student and the faculty member or instructor involved about his/her decision, in writing, within four weeks.

- The student may appeal the Dean’s decision, within one week, to the Provost’s Office. The Provost is expected to inform the student about his/her decision, in writing, within four weeks.

- If the faculty member involved in the matter is the Dean himself/herself, the student should present his or her appeal directly to the Provost's Office.
ACADEMIC DISHONESTY

Academic Dishonesty

Academic dishonesty includes and is not limited to cheating, plagiarism, multiple submissions, and collusion, the definitions of which are stated below:

Cheating

Cheating includes, but is not limited to, copying from a classmate or providing answers or information, either written or oral to others, in an examination or in the preparation of material subject to academic evaluation.

Plagiarism

Plagiarism is borrowing or using someone else's writing or ideas without giving written acknowledgement to the author. This includes copying from a fellow student’s paper or from a text or internet site without properly citing the source.

Multiple Submissions

Multiple submissions include resubmission of the same work previously used in another course or project, without the permission of the instructor for both courses.

Collusion and Impersonating

Collusion is getting unauthorized help from another person such as having someone else write one's assignment, or having someone else take an exam with false identification. Impersonating a student in an examination is also considered a grave act of dishonesty.

Fabrication

Fabrication includes, but is not limited to, falsification or invention of any information or citation in an academic exercise.

Facilitating Academic Dishonesty

Facilitating academic dishonesty includes, but is not limited to, knowingly helping another student commit an act of academic misconduct (e.g., cheating, fabrication, plagiarism, multiple submissions).

Other Forms of Dishonesty

Other forms of dishonesty, including, but not limited to, fabricating information or intentionally providing false information to the University is considered a violation of the code of conduct.

Falsification of records; and/or giving false information include and are not limited to altering, tampering, forging, or knowingly using falsified documents or records (including Koç University parking permits and identification cards); giving or providing false statements, written or oral, and/or providing false information during any university proceeding or to any university administrator or official.
KOÇ UNIVERSITY

CLASSROOM CODE OF CONDUCT

Students at Koç University are required to adhere to classroom code of conduct and to refrain from all forms of unacceptable behavior during lectures. The activities which are prohibited in class include and are not limited to:

- Engaging in side conservations.
- Using cell phones and other electronic devices.
  
  *All cell phones should be switched off before entering the lecture room. If you expect a very important call, please switch your phone to silent mode and let your professor know in advance that you may receive a call.*
- Using laptops for purposes that are not course-related.
- Arriving late or leaving early without the prior permission of the instructor.
  
  *If you have to leave during class for an emergency, please try to minimize the disruption.*
- Reading material, e.g., magazines, newspapers, novels etc., that are not course-related.
- Working on personal activities or the assignments of other courses.
- Interrupting the professor or other students.
  
  *Students should request permission from the instructor before asking questions or making comments.*
- Trashing the classroom.
  
  *Eating and drinking are allowed as long as impact on others is minimized and students clean up their garbage after class.*

Failure to comply with the Classroom Code of Conduct may result in dismissal from class and disciplinary action.