

**BIL464 Multimedia Systems
2014-2015 Fall**

Homework 1

Instructor : Mustafa Sert, Asst.Prof.Dr.

Due Date: Oct.23, 2014

Objectives

- Introduction to Multimedia
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Answer the following questions. Check the syllabi/course web page for the referenced books.

Question 1: [20pts] Exercise 1 of the Chapter 1 from the Drew's book.

Question 2: [20pts] Exercise 4 of the Chapter 1 from the Drew's book.

Question 3: [10pts] Exercise 1 of the Chapter 1 from the Burg's book.

Question 4: [20pts] Exercise 3 of the Chapter 1 from the Burg's book.

Question 5: [30pts] An RGB coded pixel is translated to a grayscale pixel using the formula: $L = 0.30 \cdot R + 0.59 \cdot G + 0.11 \cdot B$, where L represent the grayscale pixel value. Describe the reasoning behind this formula, i.e., why do we mix different amounts of R, G and B to obtain a grayscale value? The G component is important than R and B? And R is important than B? Why not use equal weights?

SUBMISSION: The hardcopy of your report.

START EARLY!!!



This is an individual work.



Submission: October 23, 2014 to the lab assistant, S. Ezgi Yalnız by 4pm. Late submission is not allowed!

***NOTE:** This is not a group assignment, and by submitting your homework it is assumed that all of the work is your own. While you may discuss the problem with other students, any students submitting the same/similar work will be given 0. We will pursue appropriate penalties according the university regulations in the case of any repetition of this behavior.*