Gebze Institute of Technology
Department of Computer Engineering

BIL 669

Advanced Topics in Computer Vision
Syllabus

Dr. Yusuf Sinan Akgul
Email: akgul {at} bilmuh.gyte.edu.tr
Phone: 2221

Current and other useful information about this course will be kept on
http://www.bilmuh.gyte.edu.tr/~akgul

Course Purpose
We will explore some of the hottest and most popular topics in Computer Vision. This
will be a seminar class and each student will prepare and give lectures about topics that
they are interested in.

Course Prerequisites
Solid knowledge on Computer Vision or Image processing is needed. Some knowledge
about Computer Graphics is also useful.

Course Material
There is no textbook. The presenters will find the relevant papers or book sections and
will make them available to the class members.

Grading
The course grade will be determined approximately as follows:
- Seminar Organization and presentation  40%
- Attendance and participation          30%
- Homeworks and grading               30%

Each student will prepare a two question homework after the presentation and will grade
the homeworks.

Attendance
Attendance is required.

Class email list
I will form a class email list for the announcements. Please send me an email with the subject line ‘BIL669 email registration’ so that I can send you class related messages.

**Announcements**
All the class related announcements will be made in class, at the class web page or by the class email list. Students are required to monitor the class web page regularly.

**Honor Code**
You should not misrepresent someone else's work as your own. Do not use work from someone else. All cases of confirmed cheating will be reported for disciplinary action.

**An incomplete list of topics suggested**
- View based synthesis
- Action recognition
- Video mosaicing
- Space carving
- Space-time stereo
- Image/video fusion
- Medical Imaging Devices
- Video/image bases and indexing
- Face detection/facial expression analysis
- Human vision
- Motion tracking
- Fast Marching Methods in Level Sets
- Graph based algorithms in Vision