Q. What are we expected to do for the Computer Vision part of the assignment?

A. This part relates to the bag of words object recognition method (as presented in the lectures).

Q. How complex each dataset should be ?

A. Each datasets is expected to contain many object categories (at the very least 5 as a minimum)

Q. How many datasets should I use?

A. You may find it beneficial to use more than one datasets to test out the different approaches within the traditional image recognition method. This will give you insight into why certain approaches might perform better over others.

Q. Can I use different datasets between the traditional and deep neural network methods?

A. Using a different dataset than the one used in Angelo's deep neural network method will make it difficult to compare the two methods/results. You are advised to use **at least one common** dataset for comparison. Two common datasets would be better.

Q. Should we classify images or also incorporate an object recognition boundary box?

A. You can simply classify images using the BoW method. Incorporating boundary boxes would be nice (and straightforward to do) however it is not required for the BoW object recognition method.

Q: What should be the format of the coursework report?

A: No specific format is expected but you are expected to answer all the coursework questions. So a section for each of these questions would make sense and also the inclusion of an introductory (and conclusions) section too. Make sure your report is clear, flows well and references to related research work are cited correctly.

Q. Can I use a double column format in the coursework paper? A. Yes, you can.

Q. Can I use appendices in my coursework report?

A. You are expected to include all the important evidence/results within the allotted 7 pages of your report. Results that are presented within the

appendices will not contribute towards your coursework marks. Having said that, you are welcome to add appendices to you report should you wish to provide further evidence that supports your claims.

Q. Should we add a literature review section, as we do in academic papers, in the coursework paper?

A. If you wish (and facilitates the overall structure of our report) yes do so. How you structure your report is up to you.

Q. Should we provide a relevant citation (research work) for every decision we make in our coursework?

A. If there is something relevant to what you have done, or If you got your idea from a research paper, **yes, you should reference it!** In any case, you should always justify the decisions you made in designing your experiments.

Q. Should I discuss approaches such as SIFT or Harris in detail?

A. It would be advisable to write a line or two to introduce the approach, but nothing too long.

Q. Can I use approaches not introduced in class, such as HOG or SURF for feature extraction and/or representation?

A. Yes you can but you have to justify your reasons. The methods you have been taught in class are more than adequate to complete your coursework

Q. There are many combinations between different approaches to mix and match from, what advice would you give when considering the different combinations to test on? (Interest point detectors, classification algorithms, local descriptors, etc)

A. You need to make these decisions yourselves when designing your experiments.