# Coursework commentary 2018–2019

## CO2227 Creative computing II: interactive multimedia

## Coursework assignment 1 – Colour and perception

### General remarks

The 2018–2019 coursework assignments were about colour, perception, and filtering, which are linked concepts. In the first coursework, the focus was explicitly on colour and perception, and students were required to complete a series of specific exercises. These were mainly about developing technical understanding and skills, though a small part of the coursework required creative development.

For the second coursework assignment, students were asked to investigate the area of filtering through desk research, and then to develop a creative artefact that linked to what they had learned in their investigation.

Students also further developed their ability to critique work – their own and others' – by providing self-reflection for their own artefact produced for coursework assignment 2, as well as critically examining the coursework assignment 1 submission of another student.

At Level 5, examiners expect students to be able to present coherent academic writing, with proper referencing and citation. In addition, insightful analysis and discussion of creative artefacts is expected, and students should be demonstrating that they are developing these abilities. Examiners were disappointed to encounter many essay submissions, for coursework 2, which included no citation and often no references. This is simply not acceptable for university work, and students are strongly advised to make sure they know how to properly cite and reference work that they use in producing essays or developing code.

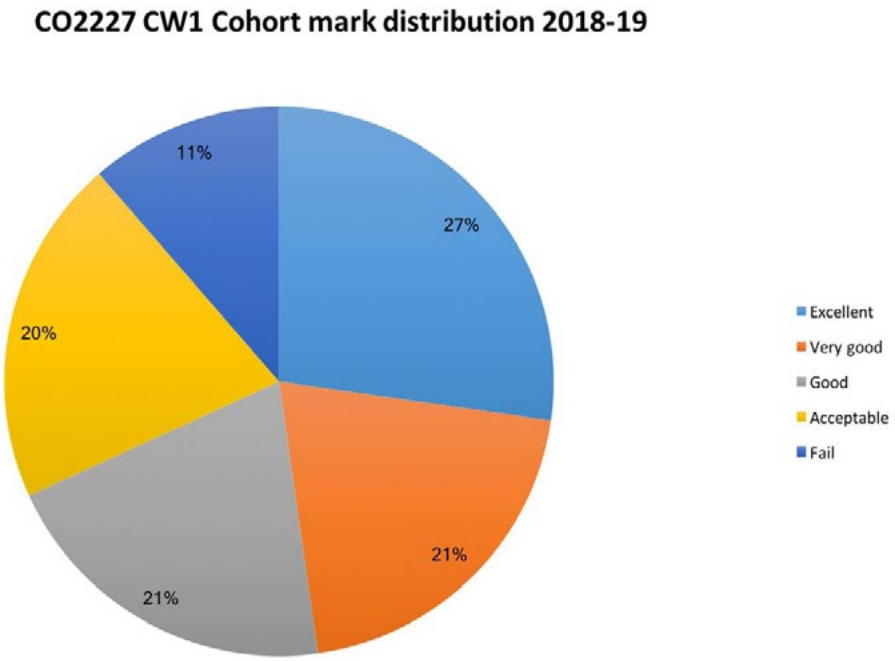
This year, the examiners were pleased to note that almost all students correctly followed the format and instructions for submission.

### Comments on specific questions

This coursework assignment comprised five different tasks, covering different aspects of colour and perceptions that students were required to work through. Finally, students were also required to identify a partner that they would be able to swap work with in order to complete a critical evaluation for coursework assignment 2. This year, a couple of students did not include swap partner details, but for the rest, all of the required information was given.

Overall, performance on this coursework assignment was good. There were some very strong submissions, with a few students scoring into the high 90s. There were also a few fails, with very weak work, but few students omitted many sections. The most often omitted section was Part E, which was a pity as this is an important way to begin creative thinking.

See cohort mark distribution for 2018–2019 below:




Parts A and B were, in the main, done reasonably, though there were a few submissions with inelegant and brute-force code. For Part C, many students used the built-in `invert` function, which did not actually provide what was required.

For Part D, at least one student did not understand that the re-sizing was about the pixel representation, rather than the physical measurements of the image, and implemented a very trivial sketch.

Nobody discussed the eventual size reduction of these images. One person, however, mentioned the fact that averaging produced a better result but took more resource (time), which showed good insight and analytic ability.

A disappointingly large number of students did not submit the re-sized images, in any form, which was an explicit requirement stated in the brief.

Part E showed some interesting ideas. One particularly innovative one was the combination of movement and pointillism, where instead of cascading blocks of pixels, particles could be used to represent the pixels. Better answers showed some detail of the resources that they might use to implement their idea, as well as linking it clearly to the exercises in the earlier part of the coursework. Another answer creatively proposed making use of a visual and perceptive anomaly that they noticed when developing Part D, to create a form of *Glitch art*, and also described how this might be done.

There were also a large number of more mundane offerings, often simply using the sketch developed in Part B to create colours. One particularly trivial example was to suggest making Part A 'more interactive. There is no possibility that examiners can award more than one or two marks for a suggestion that is so weak, and also does not include any more detail than this. It is important to look at the marks awarded for a section to obtain an idea of the level of detail that is needed. Some answers suggested two or more creative options, which invariably ended up all being much weaker than simply proposing just one strong one.

In general, the work was approached well, with the average mark being close to an Upper Second.

# Coursework commentary 2018–2019

## CO2227 Creative computing II: interactive multimedia

## Coursework assignment 2 – Filtering

### General remarks

The 2018–2019 coursework assignments were about colour, perception, and filtering, which are linked concepts. In the first coursework, the focus was explicitly on colour and perception, and students were required to complete a series of specific exercises. These were mainly about developing technical understanding and skills, though a small part of the coursework required creative development.

For the second coursework assignment, students were asked to investigate the area of filtering through desk research, and then to develop a creative artefact that linked to what they had learned in their investigation.

Students also further developed their ability to critique work – their own and others' – by providing self-reflection for their own artefact produced for coursework assignment 2, as well as critically examining the coursework assignment 1 submission of another student.

At Level 5, examiners expect students to be able to present coherent academic writing, with proper referencing and citation. In addition, insightful analysis and discussion of creative artefacts is expected, and students should be demonstrating that they are developing these abilities. Examiners were disappointed to encounter many essay submissions, for coursework 2, which included no citation and often no references. This is simply not acceptable for university work, and students are strongly advised to make sure they know how to properly cite and reference work that they use in producing essays or developing code.

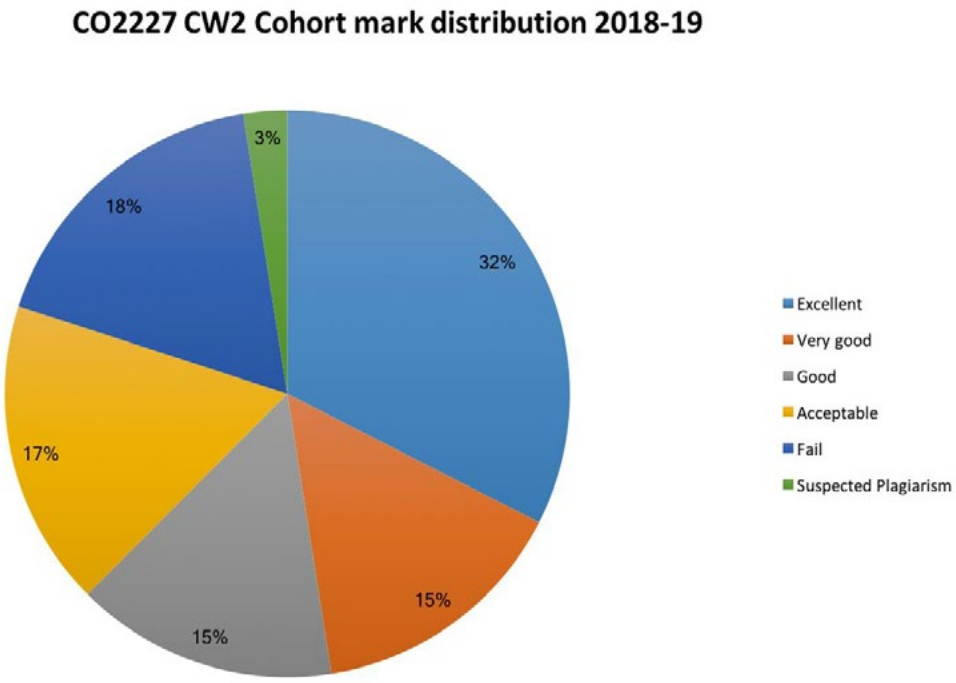
This year, the examiners were pleased to note that almost all students correctly followed the format and instructions for submission.

### Comments on specific questions

The second coursework assignment began with a requirement that students critique another student's work for Coursework assignment 1, and then went on to give students an opportunity to learn more about the area of filtering and then develop a creative artefact that could become part of their portfolio, based on this topic.

Only one student did not submit a critique of work by a fellow student as required for Part A; for the rest, there were some extremely insightful critiques, with about 15 per cent of responses obtaining full marks. It is encouraging to see that students are developing strong ability in this area. Those who did a good job were able to provide an insightful comment on both the technical and creative aspects of their swap partner's work. In general, the weakest aspect was critique of Part E, which was the creative aspect of the coursework, although this too was often done well.

See cohort mark distribution for 2018–2019 below:




Students are also better at including the required aspects, such as grades they would award, than in previous years, and the examiners were pleased to note this trend. Some students, however, did not understand how to correctly calculate averages. They worked out a percentage for each part, and simply added these marks together and divided by 5. This is an unweighted average, and students need to understand that simple averaging of averages is incorrect unless each section is worth the same amount.

For Part B, students were required to present an appropriately written essay about filtering, with a clear focus. There were a number of excellent essays in this submission, which showed a strong development of the ability to argue and bring together views from a number of different sources. However, there was a disappointing number of essays which, despite having a good list of references at the end of the essay, included no citation at all. Around a quarter of submissions had strong evidence of poor academic practice, which includes not adequately citing the sources of material used, or not correctly including the references into the reference list. This is an unacceptable practice, and students are penalised for these omissions. It is essential that students develop an ability to present appropriate academic writing, and there are many resources that explain what the requirements are (including how to avoid plagiarism advice on the VLE).

With regard to content, many students chose to make the essay a very technical one about filters, rather than including the creative aspects. Some presented the technical aspects well; however, the strongest essays included a combination of both technical and creative, and went further than simply reporting what had been read. A particularly strong essay posed the question 'what do we filter out when we use filters?', and went on to discuss various aspects relating to this very well.

Students generally performed reasonably for Part C, although there were a number of students who did not include their critique of the work provided. Weaker critiques also lacked real evaluation, and focused only on the technical and coding aspect.

Many students simply developed implementations of filters for this work; if done well, with good code, this obtained a decent mark. However, there were also a few submissions containing much more creative work, which obtained much higher marks. An example of an excellent submission was a program that used the concepts of low pass and high pass filters, in the context of brightness levels, to gradually reveal an image starting from a completely black screen. Another excellent submission used a research paper (correctly cited) describing an approach to convert digital images into pointillist ones as the basis of the work. The link with proper academic work was used very well, and the quality of the implementation was strong. One more example of a creative idea that was well implemented was a visualisation of music, again using high and low pass filters, to obtain an animation. Another example also used filters to visualise music. This student, however, took the approach of creating a 'music garden, which would be an image representation that relates to one's music likes and preferences. A great approach to a very creative idea. Finally, another great submission was where a student used the Rutt-Etra approach to video animation synthesis, originally an analogue approach, and applied it to digital video.

Overall, there were a few really strong coursework submissions, resulting in high marks. Again, the average mark was almost an Upper Second, with a large number of First Class grades achieved. Most candidates submitted good work, but some were penalised for inappropriate scholarship and/or academic writing within the essays. The examiners enjoyed seeing the creative implementations, and congratulate the students who developed strong artefacts, and encourage them to include the work in their creative portfolios.