A week of study

General study principles

- 1. **Regularly stop and check**. While studying stop regularly and check you are remembering/understanding what you have been reading/watching.
- 2. Summarise at the end. At the end of the material summarise it from memory.
- 3. **Study your answers**. After you solve a question, cover up your answer and try to recall the main steps or facts you need for this type of question.
- 4. **Practice explaining** What you have learnt (e.g., facts, concepts, how to solve questions). Pretend you are running a revision/problems class and run through what you would say.
- 5. **Recall before studying**. At the start of your next study session briefly test yourself on the main things you learnt in the last few sessions.

Example

- Pre-lecture work (asynchronous material e.g., video, handouts, course text)
 - a. Beforehand: Try to recall last weeks' material. Then check.
 - b. During: Stop regularly to think/take notes.
 - c. At the end: Explain it the main points/concepts from memory.
- Lecture
 - a. Beforehand: briefly recall your summary of pre-lecture work
 - b. During: take notes / focus as if you are about to teach this
 - c. Afterward: Explain it the main points/concepts from memory.
- Post lecture work (e.g. question sheets, activities, quizzes, etc.)
 - a. recall then recap your summary of relevant notes
 - b. solve (try without your notes first)
 - c. study your answer
 - d. finally: verbally sketch answer from memory

Computer/Software Tips

- You can speed up or slow down the videos within the settings (or use <u>Firefox Video Speed</u> <u>Controller / Chrome - Video Speed Controller</u>) I often watch videos at 1.5 or 2x speed.
- 2. You can copy parts of your screen into your notes (e.g. workflowy or a word document):
 - Windows + Shift + S then select the area you want to copy, then Ctrl + V to paste
 - CTRL + Command + Shift + 4 then select the area, then Command + V to paste
- 3. The software I prefer for taking notes is called <u>Workflowy</u>, but there is also <u>Roam Research</u>, and <u>Dynalist</u> (workflowy and dynalist have free versions) but you can always just use a word document, the main thing is how you study not the software.
- 4. You can filter the university library search for just books and/or just things that you can read on the web (look for Resource Type: "books" and Availability: "Available online" in the left-hand menu after you have searched. See: <u>Library Search Manchester</u>). This is a great way to find other explanations if the one in your course notes doesn't make sense to you.
- You can tell google to only search universities by adding "site:edu" or "site:ac.uk" to your search. You can also tell google to only find powerpoint/pdf presentations by adding "filetype:ppt" or "filetype:pdf". This is another great way to find alternative explanations <u>example</u>.

Watching a video

- 1. **Regularly stop and check**. Stop the video regularly and take notes from memory (i.e., stop ever couple of slides then with the video paused and hidden take notes)
- 2. **Summarise at the end**. When you have got to the end of the video, hide your notes, and try to summarise the key points from memory. Try pretending you are teaching a classmate about the material, or write a list of the key points, or ask yourself the reflective questions (below). Skim back over your notes or the slides to see if you missed anything. Take about 5 mins to do this.
 - What does this remind me of?
 - Why is this true?
 - When/how can I use this?
- 3. **Recall before studying**. At your next study session for this subject, or before you start work on the related question sheet, try to recall the main points from your last study session from memory. Check if you remember everything by quickly looking back over your notes afterwards. You only need to spend a few minutes doing this and by priming those memories it should make you quicker at working through the new material.
- 4. **How long should I take watching a video?** You should take about twice as long as the duration of the video working through it, e.g., you might take about 20mins working through a 10min video. If you take a lot longer than this (i.e., over 40mins for a 10min video) I would recommend discussing this with your course mates, lecturer, or academic advisor.

Reading the handouts or the textbook

- The same rules apply as with watching a video.
- **Regularly stop and check.** Stop every page/subsection, cover the book, and either take a few notes or try to recall what the main points were. Skim back over the page afterward to see if you missed anything.
- **Summarise at the end.** At the end of a chapter/section try to summarise the main points from memory (without the book or your notes). Try: using the reflective questions, pretending to teach, explaining things to other, creating mind maps (from memory).
- **Recall before studying** At your next study session for this subject, or before you start work on the related question sheet, try to recall the main points from your last study session from memory.

In/after a Lecture

- Take notes but mainly try to build understanding. Pretend you are about to teach this to one of your classmates who missed the lecture.
- Shortly after the lecture take some time to try to summarise the key points from memory. This can be by writing out some extra notes but equally it could just be while walking to the next class or in the shower that evening.

Solving question sheets

- The goal is not to get the answer but to understand how to solve similar questions. Hence if you only have time for one of these *study your answer*.
- **Recall your notes**. Find your notes on the topic and any solved examples and try to recall the main points to refresh your memory *before* starting.
- Solve the question. To strengthen your memory, and make the exam a lot easier, get as far as you can *without* using your notes.
- **Study your answer**. What were the key things to remember for this type of question? What steps should you take to get to the answer? Is there anything that tripped you up and you need to be on the lookout for? What mistakes did you make and how can you spot them next time? Is there anything that you realise you don't understand very well?
- Verbally sketch an answer. Cover up your solution and, from memory, try to recall the main steps or facts you need for this type of question. Repeat this at the start of your next study session for this subject.
- You might want to find or make a study group. Working together is often a lot more efficient and more fun! You are also a lot less likely to get stuck if you study together. But don't work together on anything that counts towards your final mark unless the lecturer says its ok.

Some things to try when you don't understand or are stuck

- Start by reading the course notes and the textbook.
- Ask other people on your course to explain it to you.
- Gather a lot of different explanations or similar worked examples: <u>google "site:edu</u> <u>filetype:ppt"</u> (to find PowerPoint presentations from other universities), <u>https://www.librarysearch.manchester.ac.uk/</u> (Resource Type: "Books"), <u>Wikipedia</u>, etc.
- Contact the lecturer / post on the discussion board, even just writing the message might be enough to clarify what you need. But if you are still stuck then I imagine lots of your course mates will be as well.