# **Designing an Effective Study Plan**

The efficient retention of large amounts of information is an important part of preparing for an exam. To do this well requires a strategy of revision. When you hear or read information for the first time in a lecture, for example, the average learner will have forgotten between 50 and 80% of it within 24 hours, Figure 1. Although remembering is not the same as understanding it is clearly a vital part of the process of learning and exam preparation.

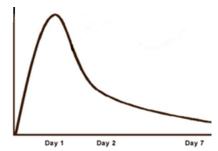


Figure 1 – Curve of Forgetting without review vs time [1]

To help you to remember and to retain information, you can use a review strategy that can be applied to learning material. Figure 2 shows the outcome of the application of this strategy. It is interesting to note from this second graph that, without any review, only 3% of new material is normally retained 30 days after hearing or reading it for the first time.

By reviewing the material for 10 minutes 24 hours after hearing or reading it for the first time, instead of continuing to forget you can raise your retention of the original information back almost to 100%. As shown on the graph, a second review lasting 5 minutes within 7 days after hearing the original material will be needed to restore the same level of retention of information. Reviewing learning material repeatedly will make it more likely that the information will be stored in long term memory.

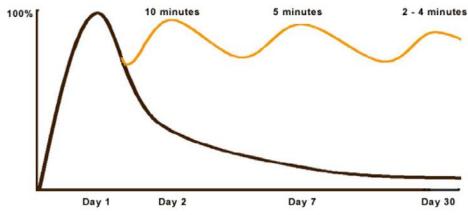


Figure 2 – Curve of Forgetting after adding reviews [1]



**Start Studying Early:** More than any other study technique, the key to performing well on exams is starting to revise early and using short, frequent study sessions. The human brain learns academic material faster and better if this is done in brief blocks of time spread out over longer periods of time, rather than in a few lengthy sessions. For example, you will perform better in an exam if you spend one hour studying each day for 20 days than if you spend 10 hours studying each day for two days before an exam.

**Cramming:** If you have to cram, and this should be avoided if you aim to optimise your performance, then try to focus on remembering the information you know rather than trying to teach yourself new information. You will typically not remember what you tried to learn the night before the exam, anyway, so it is best to make sure you REALLY know some part of the information for the exam.

**Optimising Exam Performance:** Establish good sleeping habits and stick to them during the study period leading up to the exam. It is also important to eat well, drink plenty of water and get regular exercise. It is really important to stop studying as early as possible the night before an exam and relax for a few hours before you go to bed to ensure a good night's sleep.

**Dealing with Anxiety:** By creating a plan and sticking to it you are likely to minimise the possibility of becoming anxious. If you do feel overwhelmed then seek advice. There are many techniques to help you to deal with exam stress.

If you plan ahead, many students have found that a study plan with a set number of days that includes planned review gets good results [2].

#### **Keys to the Plan**

- Space out your learning over a period of days within one week.
- During each day, prepare a new chapter or chunk of information and then review previous material.
- Divide the material you are studying so you can work on it in chunks.
- Use active learning strategies (writing and reciting) to study the material.
- Use self-testing techniques to monitor your learning.

#### References

- [1] <a href="http://www.utdallas.edu/counseling/docs/ForgettingCurve.pdf">http://www.utdallas.edu/counseling/docs/ForgettingCurve.pdf</a>
- [2] https://lsc.cornell.edu/Sidebars/Study Skills Resources/



### The Outline of a Six Day Plan

- Break the material you are revising for the exam into chunks. If it can be divided by chapter, use that. If not, make up your own chunks based on the structure of the material.
- Plan to spend about 1 1½ hours studying on each of the 6 days.

An example of the time frame for a six day plan with four chunks of material can be found below. For maximum retention, remember to schedule a 3<sup>rd</sup> review for each of the four chunks within 30 days.

Day	Action	Chunk	Time
Monday	Prepare	1st chunk	1 hour
Tuesday	Prepare	2nd chunk	1 hour
	1 <sup>st</sup> Review	1st chunk	15 minutes
Wednesday	Prepare	3rd chunk	1 hour
	1 <sup>st</sup> Review	2nd chunk	15 minutes
Thursday	Prepare	4th chunk	1 hour
	1 <sup>st</sup> Review	3rd chunk	15 minutes
Friday	1 <sup>st</sup> Review	4th chunk	15 minutes
	2 <sup>nd</sup> Review	1st chunk	10 minutes
	2 <sup>nd</sup> Review	2nd chunk	10 minutes
Saturday	2 <sup>nd</sup> Review	3rd chunk	10 minutes
	2 <sup>nd</sup> Review	4th chunk	10 minutes
	Self Test	Chunks 1, 2,3 & 4	60 minutes

## **Examples of Preparation and Review Strategies**

# **Preparation Strategies**

Read material
Highlight important text
Identify gaps in notes
Summarise material
Develop spider graphs
Make word cards
Make question cards
Make formula cards
Make self-tests
Make a list of topics that
could be in the exam
Plan essay answers
Answer tutorial questions
Find and review past papers

# **Review Strategies**

Read Summary Notes
Take notes on highlighted text
Fill gaps in notes
Recite revision notes
Replicate spider graphs
Recite word cards
Answer questions on cards
Practice writing formulas
Take self-tests
Recite list of exam topics

Answer essay questions Review tutorial problems Answer past papers

