

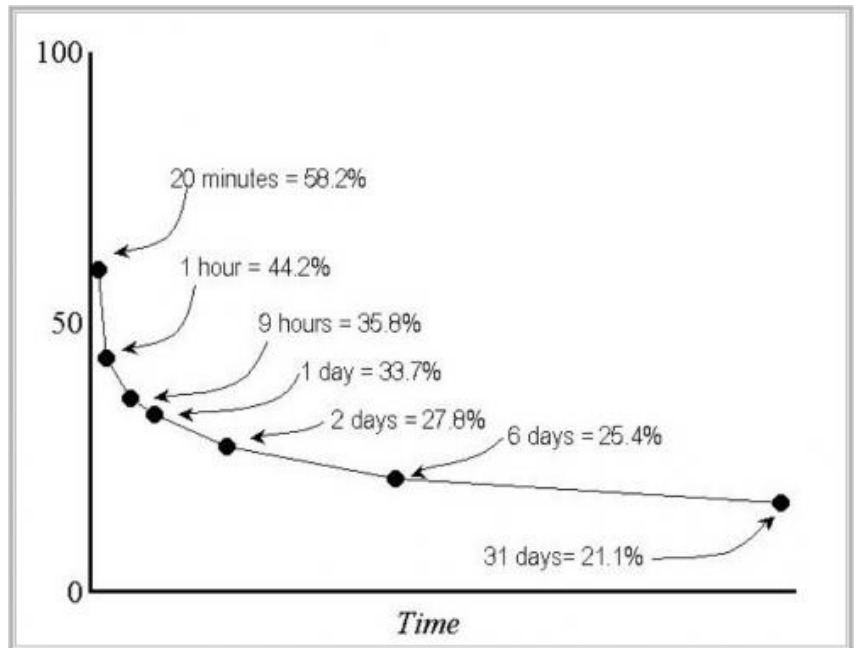
# Overcoming the Ebbinghaus Curve: How Soon We Forget

Adapted from: <http://www.elearningcouncil.com/content/overcoming-ebbinghaus-curve-how-soon-we-forget>

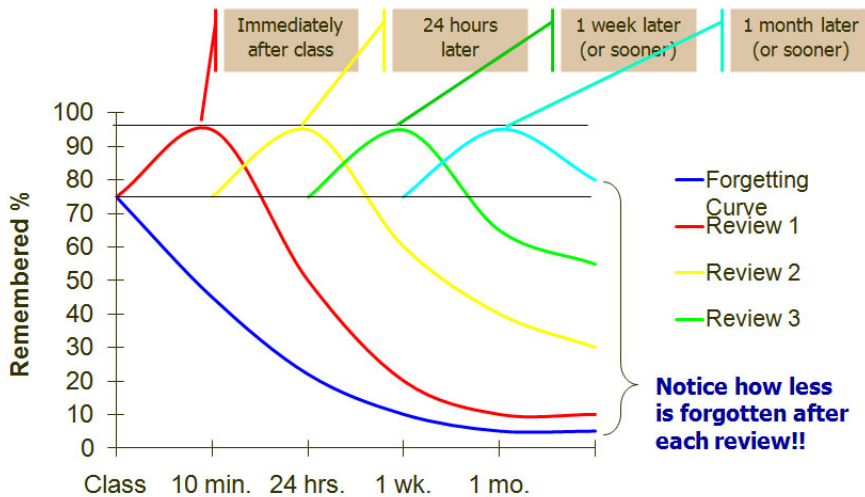
In 1885, Herman Ebbinghaus conducted an experiment, repeated over the intervening years. Subjects memorized a list of meaningless, three-letter words; Ebbinghaus then tracked how quickly his subjects forgot the words. The graph at right, known as the Ebbinghaus curve, demonstrates how rapidly his subjects (and most of us) forget such information. We typically only remember 58% of meaningless information, 20 minutes after exposure.

So how do we help students overcome the Ebbinghaus Curve? The speed of forgetting depends on a number of actionable factors such as the meaningfulness of the information, stress level, repetition of information and the use of mnemonic techniques.

Thus, making the information meaningful for students, helping to allay and manage students' fears about the material, and continual application of ideas in class are some powerful ways we can help make instruction memorable. And then there is studying.



## Overcoming the Curve



As the graph at left shows, students typically retain only 75% of the content of a lecture, immediately at its end. But students who review immediately after class recover that 25% they'd forgotten, and begin converting working memory into long-term memory. Review of information at intervals after a class has a dramatic effect on information retention. For example, students who spend 10 minutes reviewing information within 24 hours of receiving it will raise the curve almost to 100% again (<http://uwaterloo.ca/counselling-services/curve-forgetting>). A week later, it only takes 5 minutes to "reactivate" the same material and again raise the curve. By day 30, your brain will only need 2-4 minutes to give you the feedback, "Yes, I know

that..." That adds up to less time spent, with higher success, than waiting for days or weeks to study.

**So how do you overcome the forgetting curve? Great notes, promptly—and repeatedly—reviewed!**