Education & Learning / Study Guides

Design spaced repetition study schedules based on exam date and available time — retention optimization for efficient learning.
Difficulty: Intermediate
Model: GPT-4 / Claude / Gemini
Use Case: Study Planning, Time Management
Updated: June 2026
Why This Prompt Exists
Most students cram the night before — which leads to rapid forgetting. Spaced repetition produces lasting memory, but few know how to schedule it. Even fewer plan their study time strategically.

You get:

- cramming before exams (information decays quickly)
- uneven study distribution (too much too late)
- no review schedule (forgetting between study sessions)
- inefficient time allocation (studying what you already know)
- last-minute panic when schedule is unrealistic

But effective study schedules have structure:

- distribution: spread study across time (not crammed)
- spacing: increasing intervals between reviews (1, 2, 4, 7, 14 days)

- prioritization: more time on difficult topics
- active recall: testing, not re-reading
- buffer: slack for unexpected delays

Without schedule, studying is random.
This prompt generates spaced repetition study schedules.

The Prompt

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Assume the role of a learning scientist who designs spaced repetition study schedules.

Your task is to create a study schedule that optimizes retention.

Generate:

1. STUDY PARAMETERS
   - Exam date: [date or days from now]
   - Topics to cover: [list]
   - Difficulty per topic: [Easy/Medium/Hard]
   - Daily study time available: [X hours]
   - Preferred study times: [morning/afternoon/evening]

2. SPACING INTERVALS (optimal for retention)

| Review Number | Ideal Interval | Cumulative Days |
|---------------|----------------|-----------------|
| Initial learning | Day 0 | 0 |
| Review 1 | 1 day later | 1 |
| Review 2 | 2 days later | 3 |
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| Review 3 | 4 days later | 7 |
| Review 4 | 7 days later | 14 |
| Review 5 | 14 days later | 28 |
| Exam | – | – |

3. WEEK-BY-WEEK STUDY PLAN

**Week 1 (Days 1-7): Foundation**
- Day 1: [Topic A - 45min], [Topic B - 45min]
- Day 2: Review Topic A (20min), Topic C (60min)
- Day 3: [schedule]
- Day 4: [schedule]
- Day 5: [schedule]
- Day 6: [schedule]
- Day 7: Review all Week 1 topics (60min)

**Week 2 (Days 8-14): Deepening**
- Day 8: [new topics + review]
- ...

4. DAILY STUDY BLOCK TEMPLATE

| Time | Activity | Duration | Notes |
|---|---|---|---|
| [time] | Review previous material (active recall) | 20min | Use flashcards, practice problems |
| [time] | Learn new material | 45min | Focused, no distractions |
| [time] | Practice problems | 30min | Apply what you learned |
| [time] | Break | 10min | Walk, hydrate |

| [time] | Review today's material | 15min | Summarize, test yourself |

5. PRIORITIZATION MATRIX

| Topic | Difficulty | Exam Weight | Time Allocation | Priority |
|---|---|---|---|---|
| [topic] | Easy/Med/Hard | X% | X hours | High/Med/Low |

6. REVIEW TECHNIQUES BY MATERIAL TYPE

| Material Type | Best Review Method | Example |
|---|---|---|
| Facts/Terms | Flashcards (spaced) | Anki, Quizlet |
| Processes/Steps | Flowchart recreation | Draw from memory |
| Formulas | Practice problems | Varied contexts |
| Concepts | Teach someone else | Feynman technique |
| Comparisons | Venn diagrams | Fill in from memory |

7. COMMON SCHEDULING MISTAKES

| Mistake | Why It Fails | Better Approach |
|---|---|---|
| Cramming | Rapid forgetting | Space reviews over days/weeks |
| Passive re-reading | Illusion of fluency | Active recall (testing) |
| No breaks | Diminishing returns | Pomodoro (25/5) |
| Unrealistic schedule | Inconsistent follow-through | Start small, build habit |
| Ignoring difficulty | Underprepared for hard topics | Allocate more

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time to hard topics |

INPUTS:

Exam date:
[E.G., "30 days from now"]

Topics to cover:
[E.G., "Organic Chemistry: alkanes, alkenes, alkynes, alcohols,
ethers"]

Difficulty per topic:
[E.G., "Alkanes: Easy, Alkenes: Medium, Alkynes: Hard, Alcohols:
Medium, Ethers: Easy"]

Daily study time available:
[E.G., "2 hours weekdays, 4 hours weekends"]

RULES:
- Space reviews at increasing intervals (1, 2, 4, 7, 14 days) for
long-term retention
- Use active recall, not passive re-reading (testing > reviewing)
- Prioritize difficult topics with higher exam weight
- Include breaks (Pomodoro: 25min study, 5min break)
- Start with realistic schedule (consistency > intensity)
- Leave buffer days (life happens, schedule flex)
- Review schedule weekly and adjust
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How To Use It

- Space reviews at increasing intervals — 1, 2, 4, 7, 14 days for long-term retention.
- Use active recall, not passive re-reading — testing yourself is more effective than reviewing notes.
- Prioritize difficult topics with higher exam weight — allocate time by importance and difficulty.
- Include breaks — Pomodoro technique: 25 minutes study, 5 minutes break.
- Start with a realistic schedule — consistency is more important than intensity.
- Leave buffer days — life happens; the schedule should flex.
- Review the schedule weekly — adjust based on progress and difficulty.

Example Input

**Exam date:** "30 days from now"

**Topics to cover:** "Statistics: descriptive statistics, probability, hypothesis testing, regression, ANOVA"

**Difficulty per topic:** "Descriptive: Easy, Probability: Medium, Hypothesis testing: Hard, Regression: Hard, ANOVA: Medium"

**Daily study time available:** "1.5 hours weekdays, 3 hours weekends"

Why It Works

Most students cram before exams — which produces rapid forgetting. Spaced repetition produces lasting memory, but few schedule it systematically.

This framework improves outcomes by forcing: spacing interval planning, daily schedule design, prioritization by difficulty and weight, review technique matching, and buffer allocation.

**Failure modes this prevents:** Cramming before exams, uneven study distribution, no review schedule, inefficient time allocation, last-minute panic.

**This improves on:** Random study timing. Spaced repetition schedules optimize retention per hour studied.

**Related to:** SG-01 (Topic Deconstructor) for what to study; SG-02 (Study Guide Formatter) for materials.

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