Advanced Calculus 2 Summer Study Plan

A Comprehensive Guide to Mastering Calculus 2 Topics

Generated on June 21, 2025

Study Plan Overview

- Total Calculus 2 Study Time: 237.5 hours
- Daily Calculus Study: 3 hours/day
- Daily Video Editing: 2 hours/day
- Available Study Days: 71 days
- Study Period: Through September 2024

Daily Schedule Template

Time Slot	Activity	Description
10:00 - 11:00 AM	Calculus 2 Study	Focus on current unit topics with Khan
11:00 - 11:30 AM	Light Workout/Break	Physical activity to refresh mind and
11:30 AM - 12:30 PM	Video Editing Work	Part-time job responsibilities
12:30 - 2:00 PM	Lunch & Break	Meal time and personal break
2:00 - 4:00 PM	Deep Calculus 2 Study	Problem solving, practice exercises,
4:00 - 5:00 PM	Video Editing Work	Continue part-time job work
Evening	Free Time/Review	Optional review or personal time

Calculus 2 Curriculum Focus

1. Integrals review
- Estimated Time: 45 hours
- Topics: 18 topics
- Target Week: 1

2. Integration techniques

- Estimated Time: 25 hours
- Topics: 10 topics
- Target Week: 2

3. Differential equations

- Estimated Time: 27.5 hours
- Topics: 11 topics
- Target Week: 3

4. Applications of integrals

- Estimated Time: 47.5 hours
- Topics: 19 topics
- Target Week: 4

5. Parametric equations, polar coordinates, and vector-valued functions

- Estimated Time: 37.5 hours
- Topics: 15 topics
- Target Week: 5

6. Series

- Estimated Time: 55 hours
- Topics: 22 topics
- Target Week: 6

Weekly Goals & Targets

Week 1 (6/15/2025 - 6/21/2025)

- Goal: Complete 1 topics from Integrals review
- Unit: Unit 1: Integrals review
- Study Hours: 3h (1 days x 3h/day)
- Topics: Accumulations of change introduction

Note: Only 1 study days this week due to constraints

Week 2 (6/22/2025 - 6/28/2025)

- Goal: Complete 8 topics from Integrals review
- Unit: Unit 1: Integrals review
- Study Hours: 21h (7 days x 3h/day)
- Topics: Accumulations of change introduction, Approximation with Riemann sums...

Week 3 (6/29/2025 - 7/5/2025)

- Goal: Complete 8 topics from Integrals review
- Unit: Unit 1: Integrals review
- Study Hours: 21h (7 days x 3h/day)
- Topics: Accumulations of change introduction, Approximation with Riemann sums...

Week 4 (7/6/2025 - 7/12/2025)

- Goal: Complete 8 topics from Integration techniques
- Unit: Unit 2: Integration techniques
- Study Hours: 21h (7 days x 3h/day)
- Topics: Integrating with u-substitution, Integrating using long division and completing the square...

Week 5 (7/13/2025 - 7/19/2025)

- Goal: Complete 8 topics from Integration techniques
- Unit: Unit 2: Integration techniques
- Study Hours: 21h (7 days x 3h/day)
- Topics: Integrating with u-substitution, Integrating using long division and completing the square...

Week 6 (7/20/2025 - 7/26/2025)

- Goal: Complete 2 topics from Differential equations
- Unit: Unit 3: Differential equations
- Study Hours: 6h (2 days x 3h/day)
- Topics: Differential equations introduction, Verifying solutions for differential equations

Note: Only 2 study days this week due to constraints

Major Milestones

7/6/2025: Complete Integrals review

Progress: 19% (45.0h total)

7/15/2025: Complete Integration techniques

Progress: 29% (70.0h total)

8/10/2025: Complete Differential equations

Progress: 41% (97.5h total)

8/26/2025: Complete Applications of integrals

Progress: 61% (145.0h total)

9/8/2025: Complete Parametric equations, polar coordinates, and vector-valued functions

   Progress: 77% (182.5h total)

9/19/2025: Complete Series

   Progress: 100% (237.5h total)

Success Strategies

• Morning session (10-11am): Watch Khan Academy videos & take notes

• Afternoon session (2-4pm): Practice problems & work through exercises

• Take detailed notes and create summary sheets for each topic

• Review previous topics for 15 minutes each week

• Use Khan Academy mobile app during breaks for quick reviews

• Focus on understanding concepts, not just memorizing formulas

• Track your progress and adjust timeline if needed

Priority Focus Areas

• **Integration techniques and applications (highest priority)**
• **Sequences and series convergence tests**
• **Parametric equations and polar coordinate systems**
• **Real-world applications of calculus concepts**