

Name \_\_\_\_\_

## Semester Solver Answer Key

One correct optimized schedule is shown below. Other valid answers may exist.

- College Algebra, Section A  
Monday and Wednesday, 9:00 a.m. to 10:15 a.m.
- General Biology with Lab, Section A  
Monday and Wednesday, 10:30 a.m. to 11:45 a.m.  
Lab Friday, 1:00 p.m. to 3:00 p.m.
- College Writing, Section B  
Monday and Wednesday, 12:00 p.m. to 1:15 p.m.
- World History, Section B  
Tuesday and Thursday, 11:00 a.m. to 12:15 p.m.

This schedule has **no overlaps**, includes a **science lab**, includes a **humanities course**, and **no class ends after 4:00 p.m.**

### Teacher's Guide

- **Skill Focus:** Students analyze a **university style schedule**, detect **time conflicts**, and construct a **realistic optimized semester plan**.
- **Differentiation:**
  - Provide a blank weekly grid for students who need help organizing days and times.
  - Challenge advanced students to build **two different valid schedules** and compare efficiency.
- **Engagement Tips:**
  - Let students work in pairs as academic advisors defending their schedule picks.
  - Run a quick class poll on which schedule feels the most balanced and why.
- **Extension Ideas:**
  - Add a part time job or sports practice and require students to rebuild the schedule.
  - Introduce credit values and require students to reach a minimum credit total while avoiding conflicts.