

# Week 2 — API Testing & Middleware

**Apr 7 – Apr 11**


## What We're Covering

API testing tools and strategies on Day 1, middleware patterns on Day 2. You'll learn how to test your endpoints systematically and how middleware enables clean, composable request processing.

## Readings


- [What is a Web API?](#)
- [REST API Design Principles](#)

## Due This Week

 **Quiz 2 — Due: Sunday, April 12 at 11:59 PM**

[Canvas](#) · [Site](#)

Covers: What is a Web API?, REST API Design Principles

 **Check-Off: Running Web API + API Testing — Due: Sunday, April 12 at 11:59 PM**

[Canvas](#) · [Site](#)

Your first check-off. Build and run an Express API, then demonstrate API testing.

 **Sprint 0 — Due: Sunday, April 12 at 11:59 PM**

[Canvas](#) · [Site](#)

Groups form this week. Clone your repos, deploy to public URLs.

## What You Should Be Working On

- **Complete the Week 1 check-off** – Running Web API + API Testing. Get checked off by a peer.
- **Form your group** and complete Sprint 0 – clone repos, get deployed.
- **Review the Express guide** – [Intro to Express](#) covers the basics you need.
- **Review the deployment guide** – [Deploying a Simple Web API](#) walks through getting your API live for Sprint 0.
- **Read the Week 2 readings** and take Quiz 2.
- **AI Diary** – log your Week 2 entry.

## Learning Objectives & Course Outcomes

### Syllabus Learning Objectives addressed this week:

- **L01:** Design and implement RESTful web APIs using a server-side framework
- **L06:** Transfer object-oriented programming skills to a new language and ecosystem
- **L07:** Collaborate in teams using version control workflows, sprint milestones, and code review

### Course Outcomes:

- **Inquiry and Critical Thinking** – modes of inquiry, analysis, and critical synthesis
- **Communication/Self-Expression** – collaboration to solve problems and advance knowledge

---

## Lecture Demo Repo

### **TCSS 460 Backend 1**

[github.com/UWT-SET-TCSS460-LECTURE-MATERIALS/TCSS-460-Backend-1](https://github.com/UWT-SET-TCSS460-LECTURE-MATERIALS/TCSS-460-Backend-1)

Same repo as Week 1 – this week focuses on the v2 routes (middleware + validation) and the proxy pattern.

## Lecture Recaps

- [Tuesday](#)

- Thursday