Chemistry 333L **Fall 2026**

Schedule of Experiments

Text: Wade, *Organic Chemistry*, 9th edition.

Laboratory manual: California State University, Northridge, Department of Chemistry and Biochemistry, *Chemistry 333L Laboratory Manual,* Fall 2026.

Dates	Experiment, Pre-Laboratory Preparation
Aug. 24–28	Introduction Safety Review Check-In CSU Northridge Chemistry 333L Manual, pp. 1–15 UCLA video: Safety
Aug. 31 – Sept. 4	Melting-Point Analysis Evaluation of Purity by Melting-Point Determination Melting-Point Determination of an Unknown CSU Northridge Chemistry 333L Manual, pp. 16–27 CSU Northridge video: Melting-Point Determination UCLA video: Melting-Point Determination
Sept. 8–14	Recrystallization of Acetanilide CSU Northridge Chemistry 333L Manual, pp. 28–40 CSU Northridge video: Recrystallization UCLA video: Recrystallization
Sept. 15–21	Simple Distillation of α-Pinene CSU Northridge Chemistry 333L Manual, pp. 47–64 CSU Northridge video: Simple Distillation UCLA video: Simple Distillation
Sept. 22–28	Conformational Analysis with Molecular Modeling Software CSU Northridge Chemistry 333L Manual, pp. 73–78 Wade, Sections 3-11 to 3-15.

Sept. 29 – Oct. 12	Fractional Distillation of Cyclohexane and Toluene With and Without a Vigreux Column CSU Northridge Chemistry 333L Manual, pp. 65–72 CSU Northridge video: Fractional Distillation UCLA video: Fractional Distillation UCLA video: Gas Chromatography
Oct. 13–19	Extraction Which Phase is Which? The "Salting-Out" Effect Acid-Base Extraction of Benzil and Benzoic Acid CSU Northridge Chemistry 333L Manual, pp. 79–92 CSU Northridge video: Extraction CSU Northridge video: Extraction Demonstrations UCLA video: Extraction
Oct. 20–26	Thin-Layer Chromatography (TLC) TLC Analysis of *o*-Hydroxyacetophenone and *p*-Hydroxyacetophenone TLC Analysis of a Mixture of Common Analgesics CSU Northridge Chemistry 333L Manual, pp. 93–103 CSU Northridge video: Thin-Layer Chromatography UCLA video: Thin-Layer Chromatography
Oct. 27 – Nov. 2	Separation of Cholesterol and a Cholesteryl Ester by Column Chromatography CSU Northridge Chemistry 333L Manual, pp. 104–115 CSU Northridge video: Column Chromatography: Separation of Cholesterol and a Cholesteryl Ester UCLA video: Column Chromatography
Nov. 3–9	Acid-Catalyzed Dehydration of 2-Methylcyclohexanol CSU Northridge Chemistry 333L Manual, pp. 116–120 Wade, Sections 6-13 to 6-15, 7-8A to 7-8C, 7-10, 7-11, 7-17B, 7-18, 11-7, 11-10 CSU Northridge video: Acid-Catalyzed Dehydration of 2-Methylcyclohexanol UCLA video: Gas Chromatography

Nov. 12–18	Stereoselective Reduction of 4-*tert*-Butylcyclohexanone CSU Northridge Chemistry 333L Manual, pp. 121–126 Wade, Sections 10-11 and 18-11 CSU Northridge video: Stereoselective Reduction of 4-*tert*-Butylcyclohexanone UCLA video: Gas Chromatography UCLA video: Infrared Spectroscopy
Nov. 19–25	Check-Out
Nov. 30 – Dec. 4	Infrared Spectroscopy CSU Northridge Chemistry 333L Manual, pp. 127–131 Wade, Sections 12-1 to 12-12 Appendices 2A and 2B CSU Northridge video: Infrared Spectroscopy UCLA video: Infrared Spectroscopy
Dec. 7–11	Nuclear Magnetic Resonance (NMR) Spectroscopy CSU Northridge Chemistry 333L Manual, pp. 132–139 Wade, Sections 12-1 to 12-12, 13-1 to 13-13 Appendices 1B, 1C, 2A, and 2B CSU Northridge video: NMR Spectroscopy