

HPLC Theory & Practice Course Schedule

DAY 1 - B01 McCourtney Hall

10:00-12:00

Presentation (~2 hours):

- Theory of chromatography
- Particle make-up and ligands
- Important considerations in column selection
- Solid phase extraction (SPE) overview, incl. wall charts, mAb SEC guide, sorbent selection, etc.

12:00-1:00

Lunch (provided)

1:00-3:00

Lab (~2 hours):

- Rapid Analysis of vitamins and caffeine
- Demonstration of theory of chromatography and SPE with grape Kool-Aid
- Manual extraction of energy drink
- Capture in Amber vials for Lab Session 2

DAY 2 - B01 McCourtney Hall

10:00-12:00

Presentation (~2 hours):

- Basics of HPLC hardware
- Advances in HPLC instrumentation (HPLC vs. UPLC)

12:00-1:00

Lunch (provided)

1:00-3:00

Lab (~2 hours):

- Basics of components of LC, flow path, hands-on with types of detectors
- Load samples from Lab 1
- Basic operation (run samples, including standards)
- Basics of quantitation (crash course in integration, std curve, integration, data via empower report while samples are running)