

ABEN 263 Lab Plan for Spring 2021 (Last updated: March 23, 2021)

Blue shading: days requiring assistance from Niloy, Ibuk or Sanaul
M=Monono, N=Niloy, I=Ibukunoluwa, and S=Sanaul

Tentatively, Tuesday's labs in the Pilot Plant will be 2 - 5 p.m. (two 90 min sessions). Each session will have 2 groups and each group will consists of 3 students. We have 12 students currently enrolled.

1. Jan. 12: Course introduction; course pre-test (in Pilot Plant)
2. Jan. 19: Quality evaluation of canola seed (in Pilot Plant) **M, N, S**
3. Jan. 26: Mass balance for screw pressing of canola oil (in Pilot Plant) **M, N, I**
4. Feb 2: Spreadsheet software for problem and data analysis (in ABEN 210 cluster)
5. Feb. 9: 1st test (bring calculator; ABEN 215 or 210 beginning 2 p.m.)
6. Feb. 16: Fluid properties of soup concentrates and biodiesel (in Pilot Plant) **M, N, I**
7. Feb. 23: Guest speaker: Josh Kamrud, American Crystal Sugar, Moorhead, MN
8. Mar 2: Thermal energy balance on evaporator (in Pilot Plant) **M, N, S**
9. Mar. 9: 2nd Test (bring calculator; ABEN 215 beginning 2 p.m.)
NDSU Spring Break (March 15-19)
10. Mar. 23: Mid-course review & assessment (Pilot Plant beginning 2 p.m.)
11. Mar 30: Double pipe heat exchanger (in Pilot Plant) **M, N, S**
12. Apr. 6: Meet in groups via Zoom to complete DPHX data analysis
13. Apr. 13: 3rd test (bring calculator; ABEN 215 or 210 beginning 2 p.m.)
14. Apr. 20: Dataloggers and "Hot Box" Event (in ABEN 210 cluster) **M, N, I**
15. Apr. 27: Programmable logic controllers in processing (in ABEN 210 cluster) **M, N, S**
16. May 4: *Guest speaker: Don Niblock, Ardent Mills, Fairmount, ND*