UCONN | COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES

PVS 3501 Diagnostic Techniques for the Biomedical Sciences

Description: Theoretical basis and exposure to laboratory methods used in the biomedical sciences for disease diagnosis.

Week #	Date	Class
1	01-24-2022	**Lecture component:** DNA Extraction from prokaryotic cells. **Lab component:** DNA extraction from prokaryotic cells.
2	01-31-2022	**Lecture component:** Sample collection, DNA Extraction. **Lab component:** DNA extraction from eukaryotic cells.
3	02-07-2022	**Lecture component:** RNA extraction **Lab component:** RNA extraction from eukaryotic cells infected with an unknown virus.
4	02-14-2022	**Lecture component:** Extraction of Nucleic Acids from insects **Lab component:** DNA/RNA extraction from flying insects
5	02-21-2022	**Lecture component:** PCR and RT-PCR **Lab component:** Testing quality of DNA and RNA. PCR and RT PCR
6	02-28-2022	**Lecture component:** Real time PCR (qPCR) and its use in diagnostics. **Lab component:** Real time PCR (qPCR).
7	03-07-2022	**Lecture component:** Real time PCR (qPCR) and its use in diagnostics. **Lab component:** Real time PCR (qPCR).
X	3-14-2022	**Spring Break**
8	03-21-2022	**Lecture component:** Protein extraction from eukaryotic cells **Lab component:** Proteomics and diagnostics
9	03-28-2022	**Lecture component:** Detection of Infectious Diseases **Lab component:** ELISA
10	04-04-2022	**Lecture component**: Immunofluorescence **Lab component**: Immunofluorescence assay (IFA)
11	04-11-2022	**Lecture component**: Mass Spec **Lab component**: Identification of pathogens
12	04-18-2022	**Lecture component:** Next Generation Sequencing **Lab component:** How it works?
13	04-25-2022	**Lecture component**: QMS **Lab component**: Quality Management in a Diagnostic Laboratory
04/30/2022 to 05/07/2022 **FINALS WEEK**		