**MSc Practical Virology Sessions (2015-2016)**

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| **Lab. No.** | **Subject** | **Instructor** |
| 1 | Introduction: Methods of diagnosing and detecting viral infections | Dr Asmaa Baqer |
| 2 | Preparation of tissue culture, and Types of tissue culture systems | Dr Asmaa Baqer |
| 3 | Inoculation of clinical sample in tissue culture | Dr Asmaa Baqer |
| 4 | Detection of virus growth in tissue culture, demonstration of different cytopathic effects | Dr Asmaa Baqer |
| 5 | Viral Titration and TCID50 | Dr Ahmed Saheb |
| 6 | Isolation and preparation of Bacteriophages | Dr Ahmed Saheb |
| 7 | Inoculation of clinical sample in embryo-egg, and Lab animals | Dr Asmaa Baqer |
| 8 | Indirect methods: serology (ELISA, CFT and hemagglutination inhibition test). And Rapid diagnostic tests  | Dr Asmaa Baqer |
| 9 | Detection of viruses using conventional polymerase chain reaction (PCR) | Dr Asmaa Baqer |
| 10 | Detection and quantification of viral load using Real time polymerase chain reaction (RT-PCR) | Dr Asmaa Baqer |
| 11 | Detection of viruses using EM and immuno-electon microscopy (IEM). (By collaboration with the Biology Department to demonstrate preparation of viral isolate from tissue culture into a grid to be examined under EM) | Dr Asmaa Baqer |
| 12 | Detection of viruses using immunocytochemistry (ICC) (viral antigeneamia assay) and Immunohistochemistry (IHC). | Dr Asmaa Baqer |
| 13 | Detection of viruses in tissues using In situ hybridization (ISH) | Dr Asmaa Baqer |

**Red colored subjects are newly introduced labs**