**MME 2408 MATERIALS CHARACTERIZATION**

**2015-2016 SPRING SEMESTER**

**LAB PROGRAM (2nd Section)**

**REVISED**

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| **DATE** | **LAB TOPICS & LEARNING OUTCOMES (LO)** | **LAB PERSONNEL** |
|  | **Introduction to Lab work** **(report writing, homework, dress code, attendance)** |  |
|  ***11 - 15 April 2016*** ***COMPLETED*** | Lab 1: Scanning Electron Microscope (SEM) LO :- Basic structure and parts of the SEM- Sample preparation for SEM analyses-“Charging” phenomenon - Coating equipments in the Lab. | RAMAZAN DALMIŞ |
|  ***18 - 22 April 2016*** ***COMPLETED*** | Lab 2: Scanning Electron Microscope (SEM)LO:- Secondary electron image (SEI) and interpretation- Backscattered electron image (BEI) interpretation- Energy Dispersive Spectrometer (EDS) technique with SEM  | Onur ERTUĞRUL Kadir TEKİN |
|  ***25 - 29 April 2016*** | 1st MID-TERM WEEK |  |
|  ***2 - 6 May 2016*** ***COMPLETED*** | Lab 3: X Ray Diffraction LO:- Basic structure and parts of the XRD analyzer- Sample preparation for XRD - Material analysis by XRD | Serhan KÖKTAŞ Çağrı KILINÇ |
|  **11 May 2016** **WILL BE CONDUCTED** **DURING LECTURE HOURS** **AT** ***MMZ 2 & LAB*** | Lab 4: X Ray Fluorescence (XRF)LO:Basic structure and parts of the XRF analyzerSample preparation for XRF analysisMaterial analysis by XRF  |  **Şükrü KAYA** **(Hatice YILMAZ)**  **(MDN)** |
| **18 May 2016** **WILL BE CONDUCTED** **DURING LECTURE HOURS** **AT** ***MMZ 2*** **--------------------------------** ***16 - 20 May 2016*** | Lab 5: Thermal Gravimetric Analysis (TGA) Differential Thermal Analysis (DTA)LO:- Basic structure and parts of the TGA/DTA equipment- Characterization by TGA/DTA------------------------------------------------------------------------------- Lab 6: Fourier Transformed Infrared (FTIR)LO:Basic structure and parts of the FTIR equipmentSample preparation for FTIRMaterial analysis by FTIR |  **Haydar KAHRAMAN** **------------------------------------****Oylum ÇOLPANKAN** |