Lectures program ‘Biomaterials-Biomolecules’ - ΜΕΤΥ-504

spring semester 2024 (Feb-May 2024)

DT: Dr. Dimitris Tzeranis

MC: Dr. Maria Chatzinikolaidou

KV: Dr. Kelly Velonia

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| **No.** | **Lecture title** | **Instructor** | **Room** | **Day** | **Time** |
| 1 | Stem cells: biology and applications | DT |  | Tuesday6 Feb | 12:00-15:00 |
| 2 | Introduction to tissue engineering | MC |  | Tuesday13 Feb | 12:00-15:00 |
| 3 | Bone tissue engineering | MC |  | Tuesday20 Feb | 12:00-15:00 |
| 4 | Cartilage tissue engineering | MC |  | Tuesday5 March | 12:00-15:00 |
| 5 | Biofabrication: methods, and hardware | DT |  | Tuesday12 March | 12:00-15:00 |
| 6 | Cardiovascular tissue engineering  | MC |  | Tuesday19 March | 12:00-15:00 |
| 7 |  |  |  | Tuesday26 March |  |
| 7 | Modelling tissue constructs I: solid mechanics, cell response | DT |  | Tuesday2 April | 12:00-15:00 |
| 8 | Modelling tissue constructs II: fluid mechanics, transport phenomena | DT |  | Tuesday9 April | 12:00-15:00 |
| 9 | Biomaterials and biomolecules used in nanomedicine: Metals, metal alloys, ceramics  | KV |  | Tuesday16 April | 9:00-12:00 or 15:00-18:00**Or** Wed after 15:00 |
| 10 | Biomaterials and biomolecules used in nanomedicine: Peptides, Proteins, nucleic acids  | KV |  | Tuesday23 April | 9:00-12:00 or 15:00-18:00**Or** Wed after 15:00 |
| 11 | Biomaterials and biomolecules used in nanomedicine: natural and synthetic polymers  | KV |  | Tuesday14 May | 9:00-12:00 or 15:00-18:00**Or** Wed after 15:00 |
| 12 | Chemical modification of biomaterials to serve biomedical applications | KV |  | Tuesday21 May  | 9:00-12:00 or 15:00-18:00**Or** Wed after 15:00 |
| 13 | Presentations by students |  |  | Tuesday | 12:00-15:00 |
|  | Final written exams |  |  | TBA |  |