### Course Title
Materials and Health

<table>
<thead>
<tr>
<th>Level of Course Unit</th>
<th>Undergraduate</th>
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<tbody>
<tr>
<td>Semester</td>
<td>5 (Fall)</td>
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<tr>
<td>Number of ECTS Credits</td>
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<td>Language of Instruction</td>
<td>English</td>
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<td>Type of Course Unit</td>
<td>Elective</td>
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<td>Course Unit Code</td>
<td>BME313E</td>
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#### Course Content
Materials, Classifications, Materials Function, Materials Design, Multi-Dimensional Materials, Heath Effects of Materials, Red Metals (Hg, Pb, Cd, As), Powders (PM10, PM2.5), Surfaces and Coatings, Occupational Diseases and Materials, Case Studies.

#### Name of Lecturers
Prof. Dr. Fevzi YILMAZ

#### Department / Program
Department of Biomedical Engineering

#### Recommended or Required Reading

Lecturer course notes and articles.

#### Assessment Methods and Criteria

#### Objectives of the Course
Learning the specifications and medical effects of engineering materials, biomedical applications of materials.

#### Course Learning Outcomes
1. Recommendations of materials for requirement, knowledge of material performance and perception of its effects on health
2. Knowledge on sustainable topics with relations along product-material-environmental and human necessity
3. Regard on professional codes of ethics, legislative regulations, standard, norms in terms of selection of materials with social responsibility, health, hygiene and security issues