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| Course Information | | | | | |
|---------------------------|---|-------------------|------------------|--------------|---|
| Course Code | MT418 | * Credit Hours | 34 | * Credits | 2 |
| * 合 Course Name | Fundamentals of Ceramic Materials | | | | |
| (Course Type) | 与 | | | | |
| (Language of Instruction) | | | | | |
| * School | | | | | |
| Prerequisite | | | | | |
| Teacher | | | (Course Webpage) | | |
| * Description | 力 | | | | |
| * Description | <p>Ceramic materials have a long history. With the developments of modern high technologies, such as information technology, energy technology, biotechnology, space technology, a series of special requirements are put forward upon ceramic materials. The advanced ceramics, having great differences with traditional ceramics in terms of the raw materials, preparation technology and property have emerged. By making full use of the advances in the basic theory and testing technology of modern materials, the advanced ceramics develop very quickly and become one of the most active branches in material fields. The course aims to enable students to systematically master the basic knowledge of ceramic materials, deepen the understanding of the relationship between composition, structure, and property, and have a general understanding of the artificial materials design and the newest advancements of research methodology. The course covers traditional and advanced ceramics, the structural characteristics of ceramic materials, the structure and property of glass, the preparation of ceramic materials, high-temperature structural ceramics, the mechanical and thermal properties of ceramic materials, the electrical and magnetic properties of ceramic materials, dielectric ceramics and sensitive ceramics, optical ceramics.</p> | | | | |

| course syllabus | | | | | |
|---|--------------------------------|------------------------------------|-------------|------------|--|
| <p>* (Learning Outcomes)</p> | <p>1) 2) 3) 4)</p> | <p>1.1 3.1 5.1 6.2</p> | | | |
| <p>* Relationship between learning outcomes and graduation requirements</p> | <p>1</p> | <p>1.1 与 与</p> | <p>1</p> | | |
| | <p>3 /</p> | <p>3.1</p> | <p>2</p> | | |
| | <p>5</p> | <p>5.1 与 以</p> | <p>3</p> | | |
| | <p>6</p> | <p>6.2 别</p> | <p>4</p> | | |
| <p>* (Class Schedule & Requirements)</p> | | | | | |
| | | <p>2</p> | | | |
| | | <p>4</p> | | | |
| | | <p>4</p> | | | |
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| | | <p>2</p> | | | |
| <p>* (Grading)</p> | | | <p>70%+</p> | <p>30%</p> | |

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|--|---|
| <p>* (Textbooks & Other Materials)</p> | <p style="text-align: right;">2005</p> <p>W. D.</p> <p style="padding-left: 40px;">2010</p> <p style="padding-left: 100px;">2004</p> <p style="padding-left: 140px;">2000 1998 2001</p> <p style="padding-left: 180px;">2003 2004</p> <p style="text-align: right;">M. V.</p> |
| <p>More</p> | |
| <p>Notes</p> | |

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