Lecture 1









COURSE PLAN

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| Remarks | practice | Theory | Week No. |
| 1. Assignments will be given at the end of each chapter(Theory)2. Surprise quizzes will be distributed uniformly in 16 weeks (min 3) | Introduction | Introduction to engineering materials | 1 |
| Assignment  | Crystal structure | 2 |
| Assignment | Binary solution | 3 |
| Assignment | Phase diagrams | 4 |
| Assignment | Phase diagrams | 5 |
| Assignment | Iron-carbon phase diagram | 6 |
| Assignment | Iron-carbon phase diagram | 7 |
| Determination of % of Carbon | MID THEORY EXAM | 8 |
| Annealing | Single crystal deformation | 9 |
| Normalizing Processes | Strengthening of materials  | 10 |
| Hardening & Tempering Processes | Heat treatment fundamentals | 11 |
| Mechanical Properties of Heat Treated Specimens | Heat treatment fundamentals | 12 |
| Mechanical Properties of Heat Treated Specimens | Ferrous alloys | 13 |
| Review | Ferrous alloys non | 14 |
| Oral exam | Review | 15 |
| FINAL THEORY EXAM | 16 |



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