

SEM2		XE102 - Materials Engineering	
No.	Tuesday	Material identified during lecture slot	Action plan, with <i>Bold italics</i> to indicate what was not done?
1	08-Feb	2004/2005	
2	15-Feb	Groupings of materials (Metals, Polymers, Ceramics, Laminates); Physical properties (Stress, Strain, Hooke's Law)	Take a look at the recommended text book: 'Technology of Engineering Materials' (from library)
3	22-Feb	Limits of Proportionality, Modulus for elasticity (Young's Modulus), Brittleness & Ductility, % elongation, Poisson's Ratio, Toughness, Hardness & wear, Abrasive Wear, Surface Fatigue	Most of these topics I had covered in A-Level Physics, however they serve as a good refresher, and make a lot more sense this time round (still haven't taken the book out of the library!)
4	01-Mar	Thermal properties, heat treatment of metals, new case study set (group)	Does it <i>need</i> to be a group?! As an individual report to hand in, it would seem easier to me to research on my own :/ will need to email lecturer
5	08-Mar	Electrical properties of materials. Comparison of different types of metals, ceramics etc. Some worked examples using figures also	Must get the 'case study' (coursework) done by next week! (no it doesn't need to be done as a group)
6	15-Mar	(Coursework due in) Looking at atomic structures of metals and semiconductors, including doped n & p type semiconductors	Need to find some worked examples and exercises to get some practise etc (sometime...)
7	22-Mar	Easter Vacation	
8	29-Mar	Easter Vacation	
9	05-Apr	Scalars and vectors, onto moments	(left at first break) Done this (to death) in Maths-mechanics and physics A-Levels
10	12-Apr	Worked examples of moments, Ionic bonding (Electrochemistry), Electrolytes	Done it all before...
11	19-Apr	Polymers / Polymerisation, Glass transition temperature, Plastiomers	Typed up on laptop rather than hand written... A LOT EASIER (and less straining on the wrist / hand). Most of this seems to be revision of GCSE chemistry...
12	26-Apr	Polymer structure / Degrees of polymerisation / Molecular chains / Crystalline & Amorphous structures	Need to find some worked examples and exercises to get some practise etc (sometime...)
13	03-May	Silicates / Glasses / Deforming ceramics	Need to re-read the handouts
14	10-May	Alloys (Iron / Carbon) inc FCCs / BCCs	Need to re-read the handouts
15	17-May	revision	
16	24-May	revision	
17	31-May	Examination week	
18	07-Jun	Examination week	