





	Introduction	2	Lecture	X Jin & W Li
	Review and fundamentals of thermodynamics	6	Lecture/exercises	X Jin & W Li
	Calculations of free energy, solutions and thermodynamics of phase diagram	8	Lecture	X Jin & W Li
	Practice of TC software	4	Computational lab	X Jin & W Li
	Thermodynamics of phase transformation	8	Lecture	X Jin & W Li
	Thermodynamics of interfaces	6	Lecture	X Jin & W Li
	Statistics of thermodynamics	6	Lecture	X Jin & W Li
	Thermodynamics of irreversible processes	2	Lecture	X Jin & W Li
	Group assignments	4	Presentation	X Jin & W Li
	Final exam	2	At class	X Jin & W Li
	<p style="text-align: center;">20%</p> <p style="text-align: center;">30%</p> <p style="text-align: center;">50%</p>			
	<p>Regular grade 20%</p> <p>Exam grade 30%</p> <p>Curriculum project 50%</p>			
	<p>David V. Ragone, Thermodynamics of Materials, John Wiley &amp; Sons, 1995</p> <p style="text-align: center;">Nishizawa T , 2006</p> <p style="text-align: center;">2010</p>			
	<p>David V. Ragone, Thermodynamics of Materials, John Wiley &amp; Sons, 1995</p> <p>Nishizawa T, Thermodynamics of microstructure, translated by Hao Shiming, Chemical industry press, 2006</p> <p>Xu Zuyao, material thermodynamics, higher education press, 2010</p>			