

淡江大學 96 學年度第一學期課程教學計畫表

壹、科目名稱：鋼筋混凝土

貳、授課老師：廖國偉

參、開課系所班級：土木系大學部三年級

肆、必選修：必

伍、學分數：3

陸、先修科目：無

柒、教學內容及進度：

Equilibrium, compatibility and the constitutive behavior of the materials are the bases of Reinforced Concrete (RC) beam theory. This course will provide a detailed discussion of a single beam design and analysis. In addition, at the beginning, the background and benefit of using composite material such as RC in construction is introduced. Then, the analysis and design of a single beam will be discussed. Several important issues will be discussed in beam design including flexural analysis, shear and diagonal tension in beam, bond, anchorage, serviceability and so on. Only short column is introduced followed by the beam design and analysis. The strut-and-Tie models are adopted into ACI code recently and will also be included in this course if the semester schedule is allowed.

捌、授課方式：口述、投影片

玖、教學設備：電腦

拾、教材課本：Reinforced Concrete, Mechanics and Design, Fourth Edition in SI Units, James G Macgregor, James K Wight, 2005

ISBN: 0-13-197642-7

拾壹、參考書籍：

拾貳、成績考核方式：

平時成績：	20	%
期中考成績：	40	%
期末考成績：	40	%
讀書報告：		%
其他 (_____)：		%