



UNIVERSITÀ
degli STUDI
di CATANIA

DEPARTMENT OF CIVIL ENGINEERING AND ARCHITECTURE
Master's Degree in Structural and Geotechnical Civil
Engineering

Academic Year 2015/2016 - 2° Year

PONTI E GRANDI STRUTTURE

ICAR/09 - 6 CFU - 2° Semester

Teaching Staff

PIER PAOLO ROSSI

Email: prossi@dica.unict.it

Office: Edificio Polifunzionale. Via S. Sofia 64, 95124 Catania

Phone: 095-7382279

Office Hours: --

DETAILED COURSE CONTENT

1. BRIDGE TYPOLOGIES 2. PARTS OF THE BRIDGE: Deck, piers, abutments, bearing devices, expansion joints etc. 3. SELECTION OF THE BRIDGE TYPOLOGY AND MATERIALS 4. CODES 5. LOADS ON BRIDGES 6. INFLUENCE LINES 7. TORSION 8. BEAM BRIDGES 10. REINFORCED CONCRETE DECKS 11. COMPOSITE DECKS 12. FOUNDATIONS AND ABUTMENTS 13. STAY-CABLE BRIDGES 14. DYNAMIC ANALYSIS OF BRIDGES 15. SEISMIC DESIGN OF BRIDGES 16. MODELLING BY FINITE ELEMENTS 17. CONSTRUCTIONAL TECHNIQUES

TEXTBOOK INFORMATION

1. Raithel Aldo- Costruzioni di Ponti-Liguori Editore-Napoli 1970 2. Raithel Aldo.Ponti a travata - volume primo -Liguori Editore-Napoli 1978 3.Petrangeli Mario Paolo. Progettazione e Costruzione di Ponti-Masson 4. De Miranda Fabrizio. I Ponti Strallati di GrandeLuce - Edizioni Scientifiche A. Cremonese - Roma 5.Messina Claudio. L'impalcato dei Ponti-Alinea-1986 6. PriestleyM. J. N., SeibleF., CalviG. M. Seismic Design and Retrofit of Bridges; John Wiley & Sons; 1996. ISBN: 978-0-471-57998-4 7. Normative Tecniche in vigore (D.M.14/01/2008 e ss.mm.ii, Circolare 2/2/2009, Eurocodici)
