

Advanced Concrete Technology-2014

Nobuaki Otsuki

Department of International
Development

Schedule

- 10/7,10/14,10/21,**10/28**
 - 11/4,11/11,11/18,11/25
 - 12/2,**12/9**,12/16
1/6,1/13,1/20,1/27
2/3(final exam.)
(15 lectures and final exam.)
-

Contents 01 Introduction

☐ Part1 Fundamentals of Concrete

02 History

03 Cementitious Materials-Nine Millennia
and a New Century- Past, Present and
Future (1-3 lecs)

04 Structure of Hardened Concrete

05 Dimensional Stability

06 Cement

07 Admixtures

brief introduction

Part2 Developed Technologies

- ❑ 08 Concept of prestressed concrete
 - ❑ 09 Corrosion of steel bars
 - ❑ 10 Corrosion principal
 - ❑ 11 Durability
 - ❑ 12 Cracks in concrete
 - ❑ kinds of cracks, estimation of causes, repair and strengthening Dr.Nishida
 - ❑ 13 Recent researches
-

Evaluation

- Attendance (20%)
 - Final examination (80%)
-