

Advanced Concrete Technology-2009

Nobuaki Otsuki

Department of International
Development

Schedule

- 10/2,10/9,10/16,(10/23 工大祭準備でなし no class), 10/30(休講 no class),11/6,11/13,11/20,11/27,12/4,12/11,12/18
1/8,(1/15センター試験準備でなし no class),1/22,1/29
13回+試験 (13 times and final exam.)
-

Contents 01 Introduction

□ Part1 Fundamentals of Concrete

02 and 03 History

Cementitious Materials-Nine Millennia
and a New Century- Past, Present and
Future

04+05 Significance of
Concrete+Required Performances

06 Structure of Hardened Concrete

07 Dimensional Stability

10 Cement (Dr.Saito)

11 Admixtures

brief introduction

12 Strength

Part2 Developed Technologies

- 08 Concept of prestressed concrete
 - 09 Materials for PC
 - 13 High Flowable- including Anti-washout
 - 14 Light weight concrete
 - 17 Roller compacted concrete
 - 16 Adhesives in concrete
 - 18 Hydrated slag スラグ固化体
-

Part3 Related Researches and Durability

- Problems in hot countries
 - 15 Life cycle design for off shore concrete structures
-

Evaluation

- Attendance
 - Quiz
 - Final examination
-