



Topics in Part I

(with Prof. Heba Mourad)

- Introduction to cellular Systems
- GSM architecture and services
- Cell Coverage
- Co-channel interference and Adjacent channel interference
- GSM:
 - ❖ Radio Interface
 - ❖ Radio resources
- Migration to higher mobile generations





Topics in Part I (with Prof. Heba Mourad)

■ **Reports: (LTE Advanced)**

- 1- Propagation models
- 2- Architecture
- 3- Types of Interference and techniques to combat them
- 4- Radio Interface
- 5- Radio resources

■ **Presentation:**

A recent mobile generation





Topics in Part II

(with Dr Mai Kafafy)

- Multi-path Propagation
 - Multi-path diversity
 - Channel Equalization
 - Channel Coding
- ❖ Three assignments that require Matlab simulations and problem solving

