# Functional Analysis II : Operator Algebra $\,$

Lecture by Ikhan Choi Notes by Ikhan Choi

## Contents

| Chapter 1. Operators on Hilbert spaces | 9 |
|--|---|
| 1. Spectral theory                     | 4 |
| Chapter 2. $C^*$ -algebras             | Ę |
| 1. The Gelfand-Naimark theorems        | ( |
| 1.1. Commutative Banach algebras       | 6 |
| Chapter 3. Von Neumann algebras        | 7 |

### CHAPTER 1

## Operators on Hilbert spaces

#### 1. Spectral theory

### $CHAPTER \ 2$

 $C^*$ -algebras

#### 1. The Gelfand-Naimark theorems

1.1. Commutative Banach algebras.

### CHAPTER 3

## Von Neumann algebras