

## Contents

	<i>Preface</i>	page vii
<b>Part I</b>	<b>Banach algebras</b> <i>H. Garth Dales</i>	1
1	Definitions and examples	3
2	Ideals and the spectrum	12
3	Gelfand theory	20
4	The functional calculus	30
5	Automatic continuity of homomorphisms	38
6	Modules and derivatives	48
7	Cohomology	58
<b>Part II</b>	<b>Harmonic analysis and amenability</b> <i>George A. Willis</i>	73
8	Locally compact groups	75
9	Group algebras and representations	86
10	Convolution operators	98
11	Amenable groups	109
12	Harmonic analysis and automatic continuity	121
<b>Part III</b>	<b>Invariant subspaces</b> <i>Jörg Eschmeier</i>	135
13	Compact operators	137
14	Unitary dilations and the $H^\infty$ -functional class	143
15	Hyperinvariant subspaces	154
16	Invariant subspaces for contractions	160
17	Invariant subspaces for subnormal operators	166
18	Invariant subspaces for subdecomposable operators	171
19	Reflexivity of operator algebras	178
20	Invariant subspaces for commuting contractions	186
	Appendix to Part III	193
<b>Part IV</b>	<b>Local spectral theory</b> <i>Kjeld Bagger Laursen</i>	199
21	Basic notions from operator theory	201
22	Classes of decomposable operators	212

vi	<i>Contents</i>		
	23	Duality theory	226
	24	Preservation of spectra and index	230
	25	Multipliers on commutative Banach algebras	241
		Appendix to Part IV	254
	<b>Part V</b>	<b>Single-valued extension property and Fredholm theory</b>	
		<i>Pietro Aiena</i>	265
	26	Semi-regular operators	267
	27	The single-valued extension property	285
	28	SVEP for semi-Fredholm operators	298
		<i>Index of symbols</i>	319
		<i>Subject index</i>	321