

Part I

Topic	Primary text	Supplement with
Pharmacokinetics	Goodman and Gilman ¹ (Chapters 2 & 6)	
Pharmacodynamics	Goodman and Gilman ¹ (Chapters 3, 4, 5)	
Drug interactions	Stockley ² (Chapter 1)	Katzung ³
Pharmacogenetics	Goodman and Gilman ¹ (Chapter 7)	Katzung ³
Commonly used medicines	SAMF ⁴ EML ⁵	Katzung ³
Drug hypersensitivity	Goodman and Gilman ¹ (Chapter 34)	
Pharmacoeconomics	Walley ⁶ (Chapters 7 – 8)	Module Course at local institution
Drug discovery, pre-clinical evaluation and clinical development	Katzung ³ (Chapter 1) EMA guidelines (https://www.ema.europa.eu/en/strategies-identify-mitigate-risks-first-human-early-clinical-trials-investigational-medicinal https://www.ema.europa.eu/en/documents/scientific-guideline/guideline-investigation-drug-interactions-revision-1_en.pdf)	Goodman and Gilman ¹ (Chapter 1) Griffin ¹¹ ICH E8 ¹³
Evidence-based medicine	Grimes and Schulz ⁷	
Biostatistics	Harris ⁸	Kirkwood and Stern ⁹
Pharmacovigilance and pharmaco-epidemiology	Strom ¹⁰ (Chapters 1, 2,13)	WHO: World Health Organization. (2002). The importance of pharmacovigilance. World Health

		Organization. [https://apps.who.int/iris/handle/10665/42493]
Ethical principles	Moodley ¹² (Relevant chapters to be selected by the candidate based on competency of the topic)	SA GCP guidelines ¹⁴ , Griffin ¹¹ , (Chapter 32) (<i>Griffin highlights UK-based regulation and ethical principles related to medicinal products; whereas SA GCP highlights research ethical principles in line with ICH guidelines</i>)
Dispensing, pharmaceutical laws and drug regulation	Katzung ³	SAHPRA regulations

¹ Laurence L. Brunton, Randa Hilal-Dandan, Björn C. Knollmann. Goodman & Gilman's: The Pharmacological Basis of Therapeutics. Latest edition, McGraw-Hill.

² Ivan H. Stockley (edited by K. Baxter or C. Preston) Stockley's Drug Interactions: A source book of interactions, their mechanisms, clinical importance and management. Latest edition, Pharmaceutical Press

³ Katzung, BG. Basic & Clinical Pharmacology. Latest edition. Lange ***Core text***

⁴ South African Medicines Formulary (SAMF). Latest edition

⁵ The Essential Medicines List - South Africa, Latest edition

⁶ Walley T et al. Pharmacoeconomics. Latest edition, Churchill Livingstone

⁷ David A. Grimes and Kenneth F. Schulz. The Lancet Handbook of Essential Concepts in Clinical Research. Elsevier

(Accessible from: <https://www.thelancet.com/series/epidemiology-2002> and <https://www.thelancet.com/series/epidemiology>)

⁸ Harris M, Medical Statistics Made Easy, Latest edition, Taylor & Francis

⁹ Kirkwood and Stern, Medical Statistics. Latest edition, Wiley

¹⁰ Strom BL. Pharmacoepidemiology. Latest edition. Wiley

¹¹ Griffin, JP. Textbook of Pharmaceutical Medicine, 7th edition, Wiley

¹² Moodley K. Medical Ethics, Law and Human Rights: A South African Perspective. Latest edition, Van Schaik

¹³ ICH E8 - General Considerations for Clinical Trials (Available from: https://database.ich.org/sites/default/files/E8_Guideline.pdf)

¹⁴ Department of Health Ethics in Health Research: Principles, Processes and Structures, 2nd edition, DoH

Part II

Topic	Primary text	Supplement with
Rational use of all major therapeutic classes	Katzung ³	SAMF ⁴ EML ⁵ Goodman and Gilman ¹
Special risk populations	SAMF ⁴ (pages 1 – 28): Prescribing in special populations	Katzung ³
TDM	Portfolio of Learning	Journal articles
Complementary and traditional medicines / natural medicinal products	No comprehensive text currently available. Sparse data for CAMs exist, but the following CAMs currently have the most admissible evidence-base: -Cannabis -St John's wort -Gingko biloba -Rooibos tea (Aspalathlis Linearis) -African potato (Hypoxis hemerocallidea) -Aloe ferox -Echinacea -Kava -Artemisia	The top ten common medicinal plants ¹⁶ Street ¹⁷ Van Rensburg ¹⁸ The use of nonpharmaceutical forms of Artemisia ¹⁹
Poisoning	SAMF ⁴ (pages 616 – 642)	Katzung ³ Afrifox
Drugs of abuse	SAMF ⁴ (pages 635 – 639)	Katzung ³ Afrifox
Drug discovery, evaluation and development	Katzung ³ (Chapter 1) EMA guidelines	The Evolution of Master Protocol Clinical Trial Designs: A Systematic Literature Review, Meyer. EL, 2020

	(https://www.ema.europa.eu/en/strategies-identify-mitigate-risks-first-human-early-clinical-trials-investigational-medicinal https://www.ema.europa.eu/en/documents/scientific-guideline/guideline-investigation-drug-interactions-revision-1_en.pdf) ICH E8 ¹⁵	(https://www.sciencedirect.com/science/article/pii/S0149291820302447) Griffin ¹¹ (Chapter 7)
Medico-legal and regulatory aspects	Moodley ¹² SAHPRA website (Examples: Clinical Trial Participant Time, Inconveniences and Expenses (TIE) Compensation Model; Post Clinical Trial Access)	Muller ¹³ , Section 4: chapter 23 (Biosimilars)
Adverse events	Portfolio of Learning SAHPRA website (Examples: Safety Reporting During Clinical Trials)	Strom ¹⁰ (Chapter 2, chapter 13)
Clinical patient care	Katzung ³ Portfolio of Learning	SAMF ⁴ EML ⁵ Toy ¹⁴

¹ Laurence L. Brunton, Randa Hilal-Dandan, Björn C. Knollmann. Goodman & Gilman's: The Pharmacological Basis of Therapeutics. Latest edition, McGraw-Hill.

² Ivan H Stockley (edited by K. Baxter or C. Preston) Stockley's Drug Interactions: A source book of interactions, their mechanisms, clinical importance and management. Latest edition, Pharmaceutical Press

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⁴ South African Medicines Formulary (SAMF). Latest edition

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- ⁷ David A. Grimes and Kenneth F. Schulz. The Lancet Handbook of Essential Concepts in Clinical Research. Elsevier
- ⁸ Harris M, Medical Statistics Made Easy. Latest edition, Taylor & Francis
- ⁹ Kirkwood and Stern, Medical Statistics. Latest edition, Wiley
- ¹⁰ Strom BL. Pharmacoepidemiology. Latest edition. Wiley
- ¹¹ Griffin, JP. Textbook of Pharmaceutical Medicine, 7th edition, Wiley
- ¹² Moodley K, Medical Ethics, Law and Human Rights: A South African Perspective. Latest edition, Van Schaik
- ¹³ Muller, M. Clinical Pharmacology: Current Topics and Case Studies. 2010
- ¹⁴ Eugene C. Toy; David S. Loose; Shelley A. Tischkau; Anush S. Pillai. Case Files: Pharmacology (3rd edition). McGraw-Hill/ LANGE (56 Cases).
- ¹⁵ ICH E8 - General Considerations for Clinical Trials (Available from: https://database.ich.org/sites/default/files/E8_Guideline.pdf)
- ¹⁶ The top ten common medicinal plants document
- ¹⁷ Street RA, Prinsloo G. Commercially Important Medicinal Plants of South Africa: A Review. Journal of Chemistry, 2013. Available from: <https://doi.org/10.1155/2013/205048>
- ¹⁸ Van Rensburg R, Pillay-Fuentes Lorente V, Blockman M, et al. Medical cannabis: What practitioners need to know. SAMJ. 2020 Mar;110(3):192-6. Available from: <http://dx.doi.org/10.7196/samj.2020.v110i3.14403>
- ¹⁹ World Health Organization. The use of nonpharmaceutical forms of Artemisia. WHO, Geneva, 2019. Available from: <https://www.who.int/publications/i/item/the-use-of-non-pharmaceutical-forms-of-artemisia>