CURRICULUM (reading list) KJM3400 Analytical chemistry II Autumn 2016

D.C. Harris, Quantitative Chemical Analysis, 9.ed. 2016, W.H. Freeman and Company (18 p)

Ch. 19-4 Flow Injection Analysis and Sequential Injection, not "Sequential injection (2 p: 471-473)
Ch. 26-1 Ion Exchange Chromatography (714-719 (6 p: 714-719)
Ch. 26-2 Ion Chromatography no "Ion-Pair Chromatography" (4 p: 720-723)
Ch. 28-2 Dissolving Samples for Analysis (6 p: 777-782)

F.J. Holler, D.A. Skoog and S.R. Crouch, Principles of Instrumental Analysis, 6.ed. 2007, Saunders College Publishing (ca. 9 p)

Ch. 7-2 Monochromators (9 p: 180-190)

J.N. Miller and J.C. Miller, Statistics and Chemometrics for Analytical Chemistry, 6th ed. 2010 (or 5th ed. 2005), Pearson Education Limited (28 px0.7 = 20)*

Ch. 3 Significance tests (23 p: 36 -66), not the following: 3.11, 3.12 and 3.14
Ch. 4-6 Shewhart charts for mean values (2 p: 79-81)
Ch. 4-7 Shewhart charts for ranges (3 p: 81-83)

C.B. Boss and K.J. Fredeen, Concepts, Instrumentation and Techniques in Inductively Coupled Plasma Optical Emission Spectrometry, Perkin-Elmer, 3rd ed. 2004 (72 x 0.7=50p)

Ch. 2, 3, 4 and 5

R.D. Beaty and J.D. Kerber, Concepts, Instrumentation and Techniques in Atomic Absorption Spectrophotometry, Perkin-Elmer, 2002 (51 p x0.7 = 36)*

Ch. 3, 4, 5 and 6

E. Lundanes, L. Reubsaet and T. Greibrokk, Chromatography – Basic Principles, Sample Preparations and Related Methods, 2014, Wiley VCH, approximately 125 pages,

Ch. 1 General concepts (15 pages)
Ch. 2 GC (30 pages)
Ch. 3 HPLC – except pages 85-95 (46 pages)
Ch. 4 TLC (10 pages)
Ch. 8 Sample preparation – except pages 175-188 (14 pages)
Ch. 9 Quantitation (11 pages)

Total: about 250 pages (There are some overlap between the curriculum for KJM3400 and KJM2400)

Laboratory assignments KJM3400, UiO, 2016

Slides from lectures

*Calculated as A4 pages, i.e. A5 pages x 0.7