Literature list GEOV-103 Høst 2018

Obligatory literature:

Oxford University Press
ISBN: 9780199859764

A reading list is attached with the chapters covered in the course.
In case you have an older version of this book, please see the reading list labelled FIRST EDITION.

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Online literature (provided via Mitt UiB):

Gautam Sen, Petrology - Principles and Practice (2014)
Springer
ISBN 978-3-642-38800-2

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Suggested literature:

Ole Johnsen, Minerals of the World (2002)
Princeton University Press
ISBN: 9780691095370

This is a useful mineral guide book with great pictures and descriptions. Worth buying if you consider continuing in geology/geochemistry/petrology.
Reading list GEOV-103 Høst 2018

Lecture 1: What is a mineral?
Reading: Chapter 1

Lecture 2: Elements and mineral chemistry
Reading: Chapter 3 (page 49-63)

Lecture 3: Crystal structure
Reading: Chapter 3 (page 63-66) + Chapter 4 (page 67-80)

Lecture 4: Crystallography
Reading: Chapter 2 (page 11-30)

Lecture 5: Crystal growth and recrystallization
Reading: Chapter 2 (page 44-45) + Chapter 4 (page 81-83) + Chapter 5 (page 85-108)

Lecture 6: Identifying minerals: physical properties and microscopy
Reading: Chapter 6 + Chapter 7 (page 137-150 and 175-176)

Lecture 7: Identifying minerals: structural and geochemical analyses
Reading: Chapter 4 (page 83-84) + Chapter 8 (page 184-189) + Chapter 9

Lecture 8: Silicates: ortho and ring silicates
Reading: Chapter 11 (page 211-214) + Chapter 15 + Chapter 16

Lecture 9: Silicates: chain and sheet silicates
Reading: Chapter 14 + Chapter 13

Lecture 10: Silicates: framework silicates
Reading: Chapter 12

Lecture 11: Non-silicates: carbonates, sulfates and oxides
Reading: Chapter 17 + Chapter 18 (page 390-409)

Lecture 12: Non-silicates: sulfides, native elements and halides
Reading: Chapter 18 (page 409-413) + Chapter 19 + Chapter 20

Lecture 13: Minerals in magmatic rocks
Reading: Chapter 11 (page 214-219, optional) + Petrology book Chapter 2

Lecture 14: Minerals in metamorphic rocks
Reading: Chapter 11 (page 223-230, optional) + Petrology book Chapter 15
Lecture 1: What is a mineral?
Reading: Chapter 1

Lecture 2: Elements and mineral chemistry
Reading: Chapter 3 (page 39-53)

Lecture 3: Crystal structure
Reading: Chapter 3 (page 53-56) + Chapter 4 (page 57-69)

Lecture 4: Crystallography
Reading: Chapter 2 (page 6-23)

Lecture 5: Crystal growth and recrystallization
Reading: Chapter 2 (page 37) + Chapter 4 (page 69-73) + Chapter 5

Lecture 6: Identifying minerals: physical properties and microscopy
Reading: Chapter 6 + Chapter 7 (page 115-127 and 151-152)

Lecture 7: Identifying minerals: structural and geochemical analyses
Reading: Chapter 4 (page 71-73) + Chapter 8 (page 161-164) + Chapter 9

Lecture 8: Silicates: ortho and ring silicates
Reading: Chapter 11 (page 183-186) + Chapter 15 + Chapter 16

Lecture 9: Silicates: chain and sheet silicates
Reading: Chapter 14 + Chapter 13

Lecture 10: Silicates: framework silicates
Reading: Chapter 12

Lecture 11: Non-silicates: carbonates, sulfates and oxides
Reading: Chapter 17 + Chapter 18 (page 356-373)

Lecture 12: Non-silicates: sulfides, native elements and halides
Reading: Chapter 18 (page 374-377) + Chapter 19 + Chapter 20

Lecture 13: Minerals in magmatic rocks
Reading: Chapter 11 (page 186-190, optional) + Petrology book Chapter 2

Lecture 14: Minerals in metamorphic rocks
Reading: Chapter 11 (page 194-200, optional) + Petrology book Chapter 15