Ph.D. Qualifying Exam

Reading List

General Exam
(May 22nd 2023, 9 a.m. to 5 p.m.; The time changes slightly every year)

Note that these are approximate times to be used as a general guideline

Chapters 2, 3 9:00 to
Chapter 4
Chapters 5, 6
Chapters 7,8,9
Chapter 10 12:00
Break 12:00 to 2:00
Chapters 11 2:00 to
Chapter 12
Chapter 13
Chapters 14, 15
Chapter 16
Chapters 17, 18
Chapter 19
Chapter 20 5:00

Specialty Exams
(May 24th 2023, 9 a.m. to 12 p.m.; The time changes slightly every year)
Note: The core curriculum is embedded in these specialty exams. Please contact the faculty member in bold for more details on the specific specialty exams.

Reading List:
1. Course 5300 (Ceramics; Modern Ceramic Engineering by David W. Richerson, 3rd edition, Ch. 4, 5, 7, 8, 10, 11, 12, 13.1 only, 14.1 only, and 20. Handout on glass and glass processing).
2. Course 6200 (Defects; Physical Ceramics - Principles for Ceramic Science and Engineering by Y-M Chiang, D. Birnie and W.D Kingery, Ch. 1, 2, and 4)

Electronic Materials: W. Choi/ N. Shepherd / M. El-Bouanani /Anupama Kaul/A. Voevodin/
Reading List:

Metals: S. Mukherjee / S. Srivilliputhur / R. Banerjee/ R. Mishra / M. Young
Reading List:
1. Course 6300 ("Phase Transformations in Metals and Alloys", Porter and Easterling,)
2. Course 5200 ("Physical Metallurgy", Reed-Hill Abbashian Ch. 1, Ch.3 to 13, Ch. 15, 16)

Polymers: X. Li/ D. Berman
Reading List:
2. Reference book: U.W. Gedde, Polymer Physics, Kluver Academic Publishers (Ch1, 2, 3, 4, 5, 7, 8)