

University of North Carolina at Charlotte  
Department of Mechanical Engineering and Engineering Science  
Qualifying Examination Syllabus

Machine Design

1. Reference Text: Fundamentals of Machine Component Design – 5<sup>th</sup> Edition, R.C. Juvinall and K.W. Marshek, J. Wiley & Sons, 2012, ISBN: 978-1-118-01289-5.
2. The exam will cover material from the following chapters:  
1,2,3,4,5,6,8,10,11,12,14,15,16,17,18.
3. The examination is open book. Access to this book is required during the exam in order to use the various design tables and charts found throughout the book.
4. Time: 3 hours.
5. All work must be shown in a neat and organized manner.