

02457 NON-LINEAR SIGNAL PROCESSING

Curriculum (pensum) FALL 2017 E17

The course is based on the textbook by C.M. Bishop: "Pattern Recognition and Machine Learning", Springer Science and Business Media (2006), and twelve Matlab based exercises, published in pdf format in the DTU Campusnet Course 02457 under 'File sharing': **ex1.pdf** - **ex12.pdf**.

The **oral exam** will be held in December 2017 and January 2018. Location: Office 012 in DTU building 321.

The exam is based on the exercises. The exam questions are chosen among exercises 2-12 decided by an individual random draw. You are strongly encouraged to base the examination on own results obtained via the exercises. There will be an approx 20 minute long preparation period prior to the examination. Grading will be based on the oral examination only.

The curriculum (pensum) is composed of the exercise texts **ex2.pdf-ex12.pdf** and the following parts of "Pattern Recognition and Machine Learning":

Chapter 1

Sections 1.1-1.5: p. 1-41.

Section 1.5.5: p. 46-48.

Chapter 2

Section 2.3: p. 78-84.

Section 2.3.4: p. 93-94.

Section 2.3.9: p. 110-113.

Section 2.5: p. 120-127.

Chapter 3

Section 3.1: p. 137-142.

Section 3.1.4: p. 144-147.

Section 3.2: p. 147-152.

Chapter 4

Section 4.1: p. 179-190.

Section 4.2: p. 196-198.

Chapter 5

Section 5.1-5.3.2: p. 225-246.

Section 5.4: p. 249-251.

Chapter 6

Section 6.1-6.2: p. 291-297.

section 6.3.1: p. 301-303.

Section 6.4.1-6.4.2: p. 304-310.

Chapter 9

Sections 9.1-9.3.2: p. 424-444.

Lars Kai Hansen,
DTU Compute, November 2017.