Below we use the following notation:
Txbk – "Codinig theory and Cryptography" by Hankerson & others.

We may also use notations:
◊ – the proof is not obligatory,
⧫ – an important topic, the proof in particular.
Th - Theorem, Pr - Proposition, Lm - Lemma.

Content of lectures 20-21.

Lecture 20.

⧫ The weight of a word in G_{24} is divisible by 4.
Minimal distance of G_{24}.
The code G_{23} is perfect.
Decoding for G_{24}.

Introduction to Reed-Muller codes.

†Txbk: 3.5-3.7, 3.8.

Lecture 21.

Polinomial functions with m variables over $\mathbb{F}_2$:
their canonical form and the basis of 2^m monomials.

Definition of the $\mathrm{RM}(r, m)$ code.
Dimension of $\mathrm{RM}(r, m)$.
The code $\mathrm{RM}(2, 5)$ is selforthogonal.
⧫ Calculating the orthogonal code for $\mathrm{RM}(r, m)$.
⧫ Minimal distance for $\mathrm{RM}(r, m)$.

†Txbk: Look at Theorem 3.8.7, p.85, in 3.8.