Background: An electrocardiogram or ECG is a record of the electrical activity of the heart. Basic ECG interpretation is a key skill relevant to healthcare professionals in all disciplines of medicine, not only for practicing cardiologists. The complexity of ECG interpretation for beginners is often overwhelming and in many cases underestimated by ECG experts. Therefore, we aimed to design and apply a “keep it simple” teaching concept that allows all medical students regardless of their future specializations to master the most important basics of ECG interpretation.

Teaching concept: Our introductory ECG course focuses on the assessment of rhythm, calculating heart rate, determining the heart’s electrical axis, measuring relevant time and amplitude parameters, and critical evaluation of wave and segment morphology to detect abnormal and dangerous findings. We provide the students with a one-page handout that serves as guide and checklist summarizing the six key analysis steps. Following such a checklist encourages to structured analysis and prevents overlooking important findings. Mnemonics help the students remember important details. Several practical exercises serve to reinforce the lesson’s content.

Evaluation: During the winter semester 2013/14, the summer semester 2014, and the winter semester 2014/15, students at the Medical University of Graz (mostly third and fourth year students) attended our ECG course within the framework of “Module 26”. Surveys (10-20 students per group) have been performed, with a total of 258 questionnaires returned. Most students (up to 94.4% in the summer semester) strongly agreed that they had learned a lot throughout the course. Students’ satisfaction with all three courses was very high (at least 95% strongly agreed/agreed that they enjoyed attending the seminar). The same was true for the assessment of clinical relevance of contents.

Conclusion: Our “keep it simple!” teaching concept aimed to focus on the most important practically relevant aspects of ECG interpretation and was received with great acceptance by our medical students. This is a practical example which shows that teaching complex skills can be successfully simplified, resulting in high motivation on the students’ part to learn even more about this important diagnostic tool.