

BLENDING LEARNING ON PHYSICS COURSE FOR STUDENTS OF S2 EDUCATION IN SCIENCE

by Jumadi

ABSTRACT

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The emergence of the industrial revolution 4.0 resulted in a state of disruption, things which had previously well-established are transformed into drastic changes state in various aspects of human life. In the field of education, the conditions that was already well-established such as face-to-face learning transformed into large open online courses (moocs), which did not require face-to-face. This development program is a bridge to Moocs, which is a mixture of learning that is a combination of face-to-face and online learning in Physics course for limited participants namely Masters of Natural Science Education Program of Study. Expected results are students can produce teaching materials that can be applied in schools. The breakdown of course content is based on the applicable curriculum published i.e instrumentation & measurement, sensors & transducers, energy & energy conversion, atoms & nuclei, materials and their uses, and electronics fundamental circuits. Learning resources come from lecturer power points, articles from internet sources, and videos from YouTube. Lectures 1, 2, 14, 15, 16 are conducted online while lectures 3-11 are conducted face-to-face. The draft was then applied. The program can run but there are limits on field trials of teaching materials produced by students can not be applied. With the change in curriculum to be implemented in 2020, the name and content of Physics courses change into Physics in Life Systems and their contents are concepts of physics related to life, so the design that has been applied must be overhauled to suit the content of courses in the new curriculum.

Keywords: blended learning, physics, science education

Kata Kunci: *blended learning, physics, science education*