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**III CSE (3 1 Balch) Academic Year 2025–26 (Odd Semester)**

**Title of Assignment: Competency-Based Hybrid Learning: A Modern Approach to Teaching Programming and Digital Technologies Subjects**

**ABSTRACT:**

The COVID-19 pandemic prompted the global education sector to experiment with various forms of online learning as institutions rapidly transitioned to remote formats. This article presents a comprehensive overview of a competency-based hybrid learning methodology, developed and implemented during the pandemic. In addition to detailing the methodology itself, the article also shares the experiences of educators at the authors’ institution, who observed significant improvements in educational outcomes, surpassing even pre-pandemic standards. The methodology highlights the limitations of directly replicating traditional in-person instruction in an online format using existing materials and approaches. Instead, it advocates for carefully designed adaptations tailored to the digital environment, leveraging asynchronous components, interactive tools, and newly created e-learning resources to optimize effectiveness. This approach also requires increased interaction between educators and students beyond scheduled classes, ensuring timely support and guidance. Although this methodology may not suit all course types, it has proven particularly effective in advanced information and communication technologies (ICT) and digital technology subjects, such as programming, artificial intelligence, digital or electronic marketing, video editing, 3D engine work, etc. The positive student feedback further underscores the potential of this model to enhance educational quality and outcomes in these domains.

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