

## **The Qualitative Achievement of Analytical Mechanics Among Students of The Department of Physics.**

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- **Abstract:** The research aimed at identifying the qualitative achievement of analytical mechanics and its relationship to the processes of science among students of the department of physics. The sample consisted of (400) students in the department of physics, represented by (260) males (65%) and (140) females, (35%) distributed to (3) universities in Baghdad province, namely, Baghdad University, Mustansiriyah University and Al-Iraqia University. To achieve research objective, the researchers developed a test for the qualitative achievement of analytical mechanics. This test included (30) items, of which (10) items are objective and (20) items are essay. Face validity and reliability of the measurement were verified by extracting the reliability coefficient using internal consistency (Cronbach's alpha), and the statistical tools (Pearson correlation coefficient, arithmetic mean, and standard deviation). The result was that the third-stage students in the department of physics have a qualitative achievement in analytical mechanics. Consequently, the researchers made a set of recommendations and suggestions.
- **Keywords:** qualitative achievement, recommendations, Mustansiriyah University