



STATE UNIVERSITY OF MEDAN

**THE EFFECT OF ETHNOSCIENCE INTEGRATED
PHENOMENON-BASED LEARNING ON STUDENTS'
SCIENTIFIC LITERACY AND ARGUMENTATION ON
TEMPERATURE, HEAT, AND EXPANSION MATERIAL**

THESIS

**Submitted to Fulfill The Requirements for
The Degree of Bachelor of Education**

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Bilingual Natural Science Education Study Program

**BIOLOGY DEPARTMENT
FACULTY OF MATHEMATICS AND SCIENCE
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