**Title of Thesis** 

The Effectiveness of Hypothetical-Deductive Learning Cycle To Increase Senior High School Student's Achievement and Cooperation in The Teaching of Colloidal System.

Name

: Fery Surya Perdana

Id. Number

4103332016

**Study Program** 

**Bilingual Chemistry Education** 

Department

Chemistry

Approved By: Thesis Supervisor,

Dr. Marham Sitorus, M.Si NIP. 19630101 198903 1 004

Acknowledge By:

**Head of Chemistry Department** 

Coordinator of Bilingual Program,

Drs. Jamalum Purba, M.Si

NIP. 19641207 199103 1 002

Prof. Dr.rer.nat. Binari Manurung, M.Si

NIP. 19640404 198903 1 006

**FMIPA UNIMED** 

Dean,

rof. Drs. Motlan, M.Sc., Ph.D NHB 19590805 198601 1 001

Graduation Date : July 16th, 2014