

FOREWORD

Shalom, praise and gratitude to God Almighty, because of His blessings and gifts, the author was able to complete the thesis entitled "Developing Scientific Approach Based Module on Coordination System Material". This thesis is prepared to fulfill one of the requirements to obtain a Bachelor of Education degree in Bilingual Biology Education Study Program, Department of Biology, Faculty of Mathematics and Natural Sciences, Universitas Negeri Medan.

On this occasion, the author would like to express his gratitude to Mam Dr. Melva Silitonga, M.S. as a thesis supervisor who has provided many suggestions, directions, motivation, and time from the beginning of research planning until the writing of this thesis. The authors also thank Sir Dr. Hasruddin M.Pd., Mam Dra. Meida Nugrahalia, M.Sc., and Mam Dr. Ely Djulia, M.Pd as the examiner lecturer who has provided input, criticism, and suggestions so that the task of this thesis can be prepared properly. The author also thanks Mam Dr. Martina Restuati, M.Si. as an academic supervisor who has provided a lot of guidance and direction from the beginning to the end of the lecture at Unimed. Thanks again to the honorable Mam Dr. Fauziah Harahap, M.Si., as the Dean of the Faculty of Mathematics and Natural Sciences, Sir Dr. Hasruddin, M.Pd., as the head of the biology department, Mam Dr. Ely Djulia, M.Pd as the head of the bilingual biology education study program who has helped the writer a lot during the lecture. The authors also thanks to Sir Hendro Pranoto, S.Pd, M.Si, Sir Wasis Wuyung Wisnu Brata, S.Pd, M.Pd., Sir Said Iskandar Al-Idrus, S.Si., M.Si as lecturers who have assisted in validating the authors' research instrument. The author would also like to thanks Sir Sahat Sinambela, S.Pd as the principal of SMA Negeri 1 Tanah Pinem who has given me the time and opportunity to conduct research at the school. The author also thanks Mam Magdalena Surbakti, S.Si as a Biology teacher who also gave permission and direction during the research. The author also does not forget to thank the students of class XI MIPA

SMA Negeri 1 Tanah Pinem who have been willing to coordinate during the research period.

On this occasion, the author would also like to thank and dedicate this thesis specifically to my parents, Mr. Mikki Roni Sinambela and Mrs. Sahmaida Sagala. Thank you for the support, time, materials, love and motivation during this education. Especially for the writer's mother who has become a strong mother for the author. For the writer's father, the writer realizes that he never forgets to pray and take care of writer in any situation. Thank you for always being an encouragement and prayer for the author. The authors also thank my sister and brother, Hotma Agustina Sinambela and Sunarko Hermansyah Sinambela who have supported and prayed for the author to finish this thesis.

Thanks also to BESP 2018 comrades in arms, thank you for all the ups and downs in lectures that the author cannot mention one by one. The author would also like to thank Shining Shimmering Splendid Squad aka Debora Apulina Surbakti and Melva Octavia Togatorop for being friends and sharing stories during their studies. We have gone through many stories together, the author sure, this college period will be a sweet memory to remember. Let's keep this friendship until the end, because the author doesn't want this friendship to break. Also, the writer would like to thank BOEMSA girls aka Debby Purba, Catherine Sipayung, and, Melania Panggabean who always support the writer. You know what, the author really loves you guys. Finally, the writer would like to sincerely thanks to herself for being strong, persisting, keeping the spirit, and continuing to struggle in the face of every process that has been or will be faced. The author has tried her best in the preparation of this thesis, but the author is fully aware that this thesis still has many shortcomings, both in terms of content and language. With humility, the author expects suggestions and constructive criticism from readers.

Medan, July 29th 2022
Author,

Damayanty Sinambela
4183141060