CHAPTER V
CONCLUSION AND SUGGESTION

5.1 Conclusion

Based on the result of research, it can be conclude that:

1. The Feasibility STEM-Based Cell Biology Module had been developed on the validity requirements according to material experts, learning design experts, layout design experts, responses from lecturer of Biology Cell courses has very worthy criteria with percentage 83 - 90 %
2. The result of student response to the STEM-based cell biology module had developed was very worthy criteria with percentage 3,81 or 92,6 % and feasible to use as alternative learning source of students.
3. The result of STEM-Based cell biology module improve students' critical thinking skill and scientific attitude, the evidence measure of critical thinking skill show in *N-gain* score of 0.41 in small group and 0,55 in large group test. For the Scientific attitude results in both class showed that $|t_{obs}| > |t_{crit}|$ i.e. in small-group test $|0.73| > |0.65|$ and large group test $|0.64| > |0.47|$. So it was taken a statement that, this STEM-Based Cell Biology Module was very suitable to be used as learning resource and increase the critical thinking skills and scientific attitude.

5.2 Recomendations

Based on the conclusions above in this study, some recomendations that can be submitted in this study are as follows:

1. STEM-Based Cell Biology Module can be used as a alternative learning source of student indenpendent study and as an example of variations in learning resource materials in the cell biology learning process.
2. STEM-Based Cell Biology Module are can be used as a alternative learning source to foster Student critical thinking skill and scientific attitude. The needed development other learning source as reference.