

Introduction to the SEAChem2020 Secular Homeschool Chemistry Curriculum

Welcome to the SEAChem2020 homeschool chemistry curriculum. This is an introduction to the curriculum and how it works.

What does SEAChem2020 mean?

The term SEAChem2020 is meant to summarize the basic principles behind our project. The term SEA is taken from the name of SEA Homeschoolers, the organization that sponsored the conference that led to the creation of this project.

- **S stands for “secular.”** It is our firm belief that religion does not belong in a science curriculum. No statements either supporting or disputing religion will be included here.
- **E stands for “eclectic.”** This curriculum will be designed in such a way that the many diverse strengths of every child will be engaged in learning chemistry. Whether good at the sciences or good in the arts, every child should find something for them here.
- **A stands for “academic.”** This curriculum will teach only material that is accepted as accurate by a large majority of scientists practicing in the field. This goes hand-in-hand with our goal of providing a wholly secular curriculum.
- **2020 stands for our goal of finishing the first draft of this curriculum in the year 2020.**

Though our name includes SEA, we are not a part of the SEA Homeschoolers organization. However, we share our commitment to secular education with SEA Homeschoolers and work closely with them in developing this curriculum.

Is this curriculum free?

The SEAChem2020 curriculum is “free software” in several senses. First of all, it's free in that you don't have to pay for it. However, in a far more important sense, it's free in that you can use it in whatever way you'd like.

For something to be “free software”, it has to provide certain freedoms to the user. According to the Free Software Foundation, the following is true of free software¹:

- **You may use the software as you wish, for any purpose.** The intended purpose of this curriculum is to assist you with chemistry homeschooling. However, you can use this for whatever other purpose you wish (though I can't imagine what that would be).
- **You must have access to the source code and may make whatever changes to it you'd like.** The original files generated in this curriculum are the .odt files posted on the site. You may make whatever changes you'd like to them without condition.
- **You may distribute this information as is to help your neighbor.** Please feel free to email copies of these files to your friends, or print them out and give them copies. You don't need to ask permission – just do it!

¹ <https://www.gnu.org/philosophy/free-sw.html>

- **You may redistribute this information in modified form, as you'd like.** If you'd like to make changes to it and give it to others, do it. You can put it in a nice package and sell it to your friends. You can call it “Bob's Wonder Curriculum” and post it on your favorite subreddit. It's up to you.

In other words, “free” software provides you the freedom to use this software as you wish. In the case of SEACChem2020, this software also happens to be free in the financial sense, because I believe that it's wrong to charge people money for something that they really need.

Under what license is SEACChem2020 published?

This curriculum is published under a CC0 license (i.e. it's in the public domain). This means that, while I am the author of these resources, I am not their owner. You and everybody else own this together.

Are there any limitations to how these resources can be distributed?

Yes and no:

- No: Legally, you can distribute these resources in any way you'd like, either in an edited version or as-is, either without cost or for a profit. After all, *you own these resources*.
- Yes: Though I'm not going to restrict how you use these resources, I would like to suggest that, because they were intended to help as many people as possible, you distribute either their originals or changed versions under a public domain license, free of charge. Though this isn't required, I think that the spirit of the project suggests that this is the right way to go.

If you don't charge money, how can the project be built at all?

It's true that money is required for a project of any size. That said, this project has come together with the following support:

- **Volunteerism:** Nobody working on this project is being paid for their work. We are volunteering because we believe that secular science education is worth working toward.
- **Self-funding:** At this early stage, we're covering the cost of the project ourselves. However, this is not sustainable, which leads to...
- **Donations:** We hope that you who use the SEACChem2020 curriculum will consider making a donation to support the project. As mentioned earlier, there is no requirement to do so. However, running the project isn't free and we need financial help to make it happen. Donate a dollar or donate a hundred – anything you can spare is appreciated.

How do I use this curriculum?

Each of the lessons in this curriculum will contain the following:

- **Text:** A short passage presenting the material to be learned in the lesson.
- **Glossary:** The important terms contained in the lesson.
- **Practice sheet:** Questions students can learn to reinforce this knowledge.
- **Lab/activity:** Either a lab or another activity designed to get your child *doing* something. This will vary depending on the lesson, but will always include information about safety, required materials, clean-up, and anything else that's important.
- **Assessment:** A “test” to determine whether or not your child has learned the material. This test isn't just designed to judge whether or not your child has learned; it's meant as a teaching tool as well.
- **References for further study:** Information for extended research about the topics discussed here.

As part of the lesson, we also recommend that your child write their own resources as a learning tool. This includes rewriting the text in language that they understand, writing a new practice sheet, writing their own lab, and writing their own assessment. It is our belief that students learn best when they translate subject matter into terms they understand well – by writing their own resources, they ensure that they'll be well-versed in the material. Additionally, we would like to encourage your child to submit these resources to the SEACHEM2020 project to expand the project.²

The elephant in the room: Secular vs. religious homeschooling

If you're reading this, you're already aware that there are the secular and religious homeschooling communities don't get along very well. This has resulted in two entirely different sets of curricula for many subjects. This curriculum is meant to bridge the gap between secular and religious homeschoolers. Here's how:

- **This curriculum doesn't support or condemn any religious beliefs:** Part of being a secular curriculum means that we will not make statements either agreeing with or disparaging one's religious beliefs.
- **This curriculum is meant to be used by *all* homeschoolers:** Just because we're a secular curriculum doesn't mean that religious homeschoolers aren't welcome to use it.
- **This curriculum welcomes input from *all* homeschoolers:** All homeschoolers, no matter what belief, are encouraged to submit resources to further develop this curriculum. The only limitation is that any submitted resource must be secular.

There are, of course, times where religious and secular beliefs oppose one another. Take evolution for example. Secular homeschoolers generally believe that evolution has been the mechanism through which new species adapt to their environments, while religious homeschoolers frequently have creationist or intelligent design-based beliefs. In a case like this, our position will be to teach whatever belief is consistent with that of the majority of practicing scientists in the field. In this case, it's estimated that 97% of scientists believe in

² Submitted materials will be licensed under the same terms as the rest of the SEACHEM2020 project. No royalties or payment will be made, but submitted work will help to expand the curriculum and make it more useful for future students.

the validity of evolution³, so we will treat this as fact. If you are a religious homeschooler, we encourage you to pre-screen each lesson to ensure that it is appropriate for your use.⁴

Some parting words

We're extremely excited about the SEACChem2020 project and hope that you and your family will benefit from it. If you have any questions or comments, or if you wish to contribute, please shoot me an email at misterguch@gmail.com.

³ <http://www.people-press.org/2009/07/09/section-5-evolution-climate-change-and-other-issues/>

⁴ *Similarly, secular opinions that don't have a wide scientific following will be discounted. Topics in this category include global warming denial, fear of GMOs and nuclear power, and many alternative medicine theories.*