

Longwood University LIFE STEM Program  
Application Components and Instructions

In addition to the Longwood University Application, consideration for the LIFE STEM Program requires the following supplementary components:

1. A résumé outlining your academic history, community engagement, and employment experiences (If you have never written a résumé there are many resources available online.)
2. A sample of a previously written work within a STEM-related course – a piece that you will identify for what it conveys about your skills and abilities within a STEM-related discipline. There are a variety of written examples that fit this description. Some examples could be a scientific lab report, a scientific journal entry, and a formal scientific paper just to name a few.  
Note: Applicants that do not have a scientific writing sample may choose to complete an alternate scientific writing assignment. Instructions for the alternate writing assignment are available at the end of this application document.
3. Two written statements:

**Common Culture – 450-word minimum**

The LIFE STEM Program was designed to support the development of a community of learners from across our natural science majors: biology, chemistry, environmental science, physics, and dual degree engineering. Many of the great challenges of our time require collaboration among scientists with different disciplinary expertise, and thus the LIFE STEM experience will help you to prepare for that important work.

In this part of the application, we ask you to think about a fictional challenge: the zombie apocalypse. Though you may not be an expert on zombies, you are probably at least vaguely familiar with the notion: deceased humans walk the earth, seeking to feed on living humans. Imagine that you are responsible for trying to save your community from the zombies. How would you collaborate with fellow students from biology, chemistry, environmental science, physics, and dual degree engineering to conquer the zombies?

**Goals – 450-word minimum**

Describe how your qualities and attributes shaped your interest in a STEM-related field. Explain your professional aspirations and how a STEM major and the LIFE STEM Program are beneficial in helping you obtain these goals.

4. **Two letters of reference** from
  - (1) someone who can speak to your interest in and dedication to pursuing a degree in science as well as your overall professionalism, and
  - (2) someone who can speak in reference to your interest in being part of a unique learning community.

**Submission:**

Applications should be submitted electronically as an attached PDF or Microsoft Word document to LIFESTEM@longwood.edu. Letters of reference can also be emailed directly to this address. Inquiries and questions should be directed to LIFESTEM@longwood.edu.

The LIFE STEM Program application deadline is **January 10, 2018**. Candidates submitting the complete LIFE STEM application will be evaluated and notified on a rolling basis beginning at the end of January. Candidates may be asked for a formal on-campus interview or one conducted via Skype. Preference will be given based on financial need and applicants living within south central Virginia.

***Alternative Scientific Writing Assignment***

As an alternative to a previously written work within a STEM-related course as describe above, write a short essay (500-600 words) answering the question below. In writing your essay, draw upon (and cite) at least four scholarly science sources. Review the 2016 State of the Bay report, which can be found at

<http://www.cbf.org/document-library/cbf-reports/2016-state-of-the-bay-report.pdf>

Reflecting on the content of the State of the Bay report, what do you see as the most critical threat to the Bay ecosystem?