## Winthrop University SEA-PHAGES (BIOL 270 & 271) & SEA-GENES (BIOL 526) Research Courses Application

| Name:                                     |      |
|---|------|
|   |      |
| City:                                     |      |
| State:                                    | Zip: |
| Email Address:                            |      |
| Telephone:                                |      |
| GPA:                                      | _    |
| *SAT Score:                               |      |
| *And or ACT Score:                        |      |
| *Did you take AP or IB Biology?           |      |
| YES/NO                                    |      |
| Do you have a most recent score of grade? | or   |

The SEA-PHAGE + SEA-GENES project is a cohesive unit of three semesters of genuine research, which amounts to a total of 8 hours credit towards your undergraduate degree. Applicants are applying for a space in a nationally sponsored research experience. As such, accepted students are expected to take all three components of the project during their freshman and sophomore years at Winthrop University.

The BIOL 270 Discovery component of SEA-PHAGES is a lab taken in your first semester as a freshman and will be a co-requisite with BIOL 220 (cell and molecular biology) lecture. This SEA-PHAGE lab is an alternate to the regular Introductory Biology lab course (222) but counts as 2hrs credit rather than 1hr. You will then take the second half of the PHAGES course in the subsequent spring semester of your freshman year (course: BIOL 271 Bioinformatics lab, also 2hrs credit), which replaces the BIOL 223 lab that is associated with BIOL 221 evolution and ecology (lecture). During the fall semester after this, as a sophomore, each experienced SEA student is paired with a new incoming freshman SEA-PHAGE student, to act as his or her peer mentor and so continue to be involved in the program. In the spring of this sophomore year, you will take the SEA-GENES course (BIOL 526) and go back to the bench to participate in more research. The lab fees for 270 and 526 (both "wet" labs) include all the lab manuals, consumables, equipment and protocols. NOTE: There is no additional lab fee for the Bioinformatics (BIOL 271) course. Winthrop students are required to have a laptop; we *strongly* recommend a PC computer (Windows 10 works best with the software you will use, Apple Macs are not compatible)

For more information about the national SEA-PHAGES program, please visit <a href="https://www.hhmi.org/">https://www.hhmi.org/</a> programs/science-education-alliance

On the next page, use the space to describe why you are interested in the SEA Project and how it will benefit you. Include any experience, relevant courses and/or projects you have had in the field of science that may have influenced your interest. Then, save this completed form and send to Dr. Frost here: <a href="frostv@winthrop.edu">frostv@winthrop.edu</a> Good Luck!

| Personal Statement & Commitment: |       |  |
|----------------------------------|-------|--|
|                                  |       |  |
|                                  |       |  |
|                                  |       |  |
|                                  |       |  |
|                                  |       |  |
|                                  |       |  |
|                                  |       |  |
|                                  |       |  |
| Signature:                       | Date: |  |
|                                  |       |  |
|                                  |       |  |
|                                  |       |  |