

Seminar or Thesis? That is the Question

Alexandra Ayala

Department of Biology
Lake Forest College
Lake Forest, Illinois 60045



Senior Seminar BIOL 480 Class during Neural Frontiers Workshop

As students reach their last year of college, they are faced with the ultimate challenge of their undergraduate experience. Biology seniors at Lake Forest College culminate their four year journey with one of two, and sometimes even both, capstone projects: senior seminar and/or a senior thesis. Choosing between the two routes may be a hard decision, but understanding the goals, advantages, and disadvantages of each may help students realize which path is the best for them. Luckily, the biology department at Lake Forest College makes this decision easier as it challenges students intellectually regardless of the path they choose.

The majority of biology seniors, after careful analysis of the options, proceed to take senior seminars. Unlike smaller departments, such as physics – which offers one seminar every other year – biology department is able to provide students with two seminar courses each year, one per semester. The department chooses the topic for each seminar, and if the course consists of a topic of interest, it is highly recommended that you take it. If this is the case, your final course will give you the chance to dive deep into the current and novel studies in your field of interest. Another aspect to consider, especially for those on the pre-med track, is that senior seminars require only one semester of hard and stimulating work. This is ideal because it leaves enough time to shadow, volunteer, and complete other resume-building activities crucial for medical school applications. More importantly, this semester-long journey provides graduating students with goals and skills necessary for future biological careers. In senior seminars, students excel at proposing experiments that will advance their knowledge and help them understanding ethical responsibilities and consequences in the field of biology. Finally, it provides the opportunity for students to be familiar with and feel confident presenting and teaching biological topics and cutting-edge research. Another added bonus for non-loving lab students is that hands-on research is not required.

The principal difference between a biology senior seminar and a senior thesis is the amount of laboratory work

required. To complete a thesis, students must truly enjoy research. Unlike seminars, a thesis is a year-long project requiring dedication, patience, and discipline. When asked, the first and most common response to why students choose a thesis as their capstone is the hands-on experience they are exposed to, which truly mimics work conducted in graduate school. Students choose senior theses because they strive to be challenged and enjoy putting their critical thinking skills to work on a daily basis. Until recently, senior theses have been restrained to projects conducted in one of the five laboratories at Lake Forest College; however, the doors have been opened for completing theses in other institutions. Some pioneers of such projects are Daryn Cass'10 and Aaron Nash'10 who will complete their senior theses at Rosalind Franklin and the Field Museum respectively. Finally, for students considering any type of graduate studies, it is important to realize that regardless of your career goals (graduate or medical school) a thesis project is highly valued and considered by acceptance committees.

There is a third choice, however, as some students including myself, choose to challenge themselves by taking both a senior thesis and a senior seminar. Though this path may seem extreme, students should always consider it as it may complete and enhance their undergraduate achievement. Even though I was set to complete a thesis, I chose this option as I was extremely interested in the neuroscience-focused senior seminar offered this year. Both options complemented my studies and my interests in neuroscience and molecular biology. Ultimately a senior seminar and thesis were a perfect fit for my senior year. Many students believe that senior seminars are “easier” than theses, and in many cases this is true; however, my seminar entitled “Neural Frontiers” has been the most rewarding challenge I have encountered in a classroom setting. On the other hand, my thesis was in turn the most challenging out-of-classroom experience I had at Lake Forest College. Regardless of the route taken, challenges are sure to arise but with hard work and dedication success is only a step behind.

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