Since the discovery of penicillin in the 1920’s, antibiotics have become the standard treatment for bacterial and fungal infections. The overuse of these antibiotics has however led to the development of antibiotic resistance amongst bacterial populations. The emergence of these new antibiotic resistant bacteria or “superbugs” has created a significant human health hazard. Yet, only three new classes of antibiotics have been developed in the last 40 years. So how do you design a novel antibiotic? In this seminar, Jeremy Johnson will explain the basics of drug design and describe the construction of novel antibiotics using undergraduate laboratories at Butler.