BIOLOGICAL METHODS: A NOVEL COURSE IN UNDERGRADUATE BIOLOGY. R. P. Learmonth, M. Kotiw and M. W. Sutherland. University of Southern Queensland, Toowoomba QLD 4350 Australia

We describe a novel course in first year undergraduate practical biology which introduces students to the principles and practice of biological techniques as well as developing conceptual skills in experimental design, data gathering and analysis, problem solving and report writing. The course provides a firm foundation in a number of biological techniques, which ensures a more efficient transition to higher levels of study. The unit content is amenable to alteration and is largely independent of the disciplines taught. In our case the course was centred on microbiology and biochemistry, however we are currently considering the inclusion ecological methods and there are no constraints for including other science disciplines. The strength of the unit is its holistic approach to the scientific process and design which facilitates learning and practice of both low level and high level skills. This unit is run as a supplement to our traditional first year offering. In the biological techniques course, rather than being overloaded with a weekly variety of new techniques (as tends to happen in traditional courses), students are able to gain mastery of a limited number of techniques and related concepts through repetitive application.