# SES Microbial Methods
## Readings 2017

There are no required textbooks in this course, but *Brock Biology of Microorganisms* , 12th ed. by Madigan, Martinko, Dunlap and Clark (2009) is highly recommended (ISBN: 0-132-32460-1)

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| **2: Bacterial abundance** | | |
| Porter & Feig (1980) *Limnology and Oceanography* **25** | The use of DAPI for identifying and counting aquatic microflora | 943 - 948 |
| *Brock Biology of Microorganisms, 12th Ed.* | 2.1-2.3 Seeing the very small | 26 - 31 |
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| *Brock Biology of Microorganisms, 12th Ed.* | 6.5-6.7 Growth of bacterial populations | 147 - 150 |
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| Simon&Azam (1989) *Marine Ecology Progress Series* **51** | Protein content and protein synthesis rates of planktonic marine bacteria | 201 - 213 |
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| Lehninger (1979) *Biochemistry* | Ch 8. Enzymes: kinetics and inhibition | 183 - 195 |
| H.-G. Hoppe (1993) *Aquatic microbial ecology* | Ch 48 Use of fluorogenic model substrates for extracellular activity measurements of bacteria | 423 - 431 |
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| *Brock Biology of Microorganisms, 12th Ed.* | 18.9 Alveolates | 528 - 530 |
| Caron,D.A., et al. (2012) *Annu. Rev. Mar. Sci.* **4** | Marine Protistan Diversity | 467 - 493 |
| Azam et al. (1983) *Marine Ecology Progress Series* **10** | The ecological role of water-column microbes in the sea | 257 - 263 |
| **7: Molecular techniques** | | |
| *Brock Biology of Microorganisms, 12th Ed.* | Chap 13 Microbial Genomics | 343 - 366 |
| | 22.4-22.6 Molecular methods | 661 - 666 |
| | 22.8 Stable isotopes | 669 - 671 |
| Head, I.M., J.R. Saunders and R.W. Pickup (1998), *Microbial Ecology* **35** | Microbial Evolution, Diversity and Ecology: A Decade of Ribosomal RNA Analysis of Uncultivated microorganisms | 1 - 21 |
| MoBio: Soil DNA isolation kit | Instruction manuel | 1 - 8 |
| **8: Microbial food webs: bacteria phytoplankton competition** | | |
| Caron et al. (1988) *Hydrobiologia* **159** | Experimental demonstration of the roles of bacteria and bacterivorous protozoa in plankton nutrient cycles. | 27 - 40 |