

OEB 277
Topics in Symbiosis:
The Human Microbiome
Spring 2018

Instructor: Prof. Colleen M. Cavanaugh,
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Course Description: Graduate seminar. Open to undergraduates with permission of Instructor.

Learn who lives with you and why you are more than human!

This course will focus on the human microbiome and related microbial associations, e.g., model and wild animals, in sickness and in health. Evolutionary, ecological, physiological, and molecular aspects will be considered, with critical review and discussion of current literature. Lectures, critical reading and discussion of research papers, and student presentations.

Prerequisite: LS 1a, 1b or equivalent, microbial science course(s), or permission of instructor.

Class Meeting : 1st class: Wednesday 1:30 – 3:59 pm Biolabs 2017

Requirements :	Preparation and active and insightful participation in discussions	Grades
	Topic/paper presentations	40%
	Final research paper	35%
		25%

Weekly Readings : 1 - 2 reviews, 1-2 research papers. Reviews will cover aspects of weekly topic including ecology, physiology, phylogeny, molecular biology.

Texts/Books: Useful reference books for this course are as follows. (On reserve at Cabot Library)

Symbiosis:

The Biology of Symbiosis, D.C. Smith and A.E. Douglas, Edward Arnold Ltd., 1987

Evolution by Association – A History of Symbiosis. J. Sapp, Oxford University Press, 1994

The Symbiotic Habit, A.E. Douglas, Princeton Univ. Press, 2010

I Contain Multitudes- The Microbes Within Us and a Grand View of Life. Ed Yong, London : The Bodley Head, an imprint of Vintage, 2016.

Microbiology

Brock Biology of Microorganisms, Prentice-Hall, Inc. Englewood Cliffs, N.J

Handbooks

The Prokaryotes (online)

Bergey's Manual of Systematic Bacteriology