

COURSE IMPLEMENTATION DATE: September, 2006
 COURSE REVISED IMPLEMENTATION DATE:
 COURSE TO BE REVIEWED: September, 2009
 (Four years after UPAC final approval date) (MONTH YEAR)

OFFICIAL COURSE OUTLINE INFORMATION

Students are advised to keep course outlines in personal files for future use.
 Shaded headings are subject to change at the discretion of the department and the material will vary
 - see course syllabus available from instructor

FACULTY/DEPARTMENT: DHYG 101	Faculty of Science, Health and Human Services / Dental Hygiene Program	3
COURSE NAME/NUMBER	FORMER COURSE NUMBER	UCFV CREDITS
	Microbiology for Dental Hygiene	
COURSE DESCRIPTIVE TITLE		

CALENDAR DESCRIPTION

This course introduces dental hygiene students to microbiology. Topics include an introduction to microscopy, prokaryotic cell structure and function, bacterial nutrition, microbial metabolism, control of microbial growth, oral microflora, and animal viruses.

PREREQUISITES: **Admission to the Dental Hygiene Program**
 COREQUISITES: **DHYG 160**

SYNONYMOUS COURSE(S)	SERVICE COURSE TO:
(a) Replaces: _____ (Course #)	_____
(b) Cannot take: _____ for further credit. (Course #)	_____

TOTAL HOURS PER TERM: 45	TRAINING DAY-BASED INSTRUCTION
STRUCTURE OF HOURS:	LENGTH OF COURSE: _____
Lectures: 15 Hrs	HOURS PER DAY: _____
Seminar: _____ Hrs	
Laboratory: 30 Hrs	
Field Experience: _____ Hrs	
Student Directed Learning: _____ Hrs	
Other (Specify): _____ Hrs	

MAXIMUM ENROLLMENT:	16
EXPECTED FREQUENCY OF COURSE OFFERINGS:	fall term 1st year only
WILL TRANSFER CREDIT BE REQUESTED? (lower-level courses only)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
WILL TRANSFER CREDIT BE REQUESTED? (upper-level requested by department)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
TRANSFER CREDIT EXISTS IN BCCAT TRANSFER GUIDE:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

AUTHORIZATION SIGNATURES:

Course Designer(s): _____ Shauna Warner	Chairperson: _____ Rosie Friesen (Curriculum Committee)
Department Head: _____ Wanda Gordon	Dean: _____ Jackie Snodgrass
PAC Approval in Principle Date: _____	PAC Final Approval Date: September 30, 2005

LEARNING OBJECTIVES / GOALS / OUTCOMES / LEARNING OUTCOMES:

The student will be able to:

1. Use aseptic techniques in the microbiology lab
2. Understand the practice of universal precautions
3. Summarize the role of microorganisms in oral health and disease processes
4. Evaluate the role of the dental hygienist in preventing the spread of infectious disease in the dental clinic
5. Use the compound microscope correctly
6. Use isolation techniques correctly
6. Prepare and fix bacterial smears to be stained
7. Understand various methods for controlling microbial growth
8. Perform various bacterial metabolic tests

METHODS:

Lecture, demonstration, laboratory exercises

PRIOR LEARNING ASSESSMENT RECOGNITION (PLAR):

Credit can be awarded for this course through PLAR (Please check:) Yes No

METHODS OF OBTAINING PLAR:

Challenge exam

TEXTBOOKS, REFERENCES, MATERIALS:

[Textbook selection varies by instructor. An example of texts for this course might be:]

UCFV DHYG 101 Laboratory Manual and Anthology Text

SUPPLIES / MATERIALS:

Lab coat, safety glasses purchased for DHYG 160

STUDENT EVALUATION:

[An example of student evaluation for this course might be:]

The final grade for this course will be awarded, based on the following:

Didactic

Midterm exam	20%
Final exam	30%

Lab:

Lab Quiz #1	15%
Lab Quiz #2	15%
Final exam	15%
Assignments, pre lab quizzes	5%

UCFV letter grading system will be used. A passing grade will be 70% (B-)

COURSE CONTENT:

[Course content varies by instructor. An example of course content might be:]

Main Themes / Critical Elements are:

1. Microscopy: compound microscope, phase contrast microscopy, bright field microscopy
2. Isolation techniques; transferring bacterial cultures; preparing pour plates; describing bacterial colonies using standard terminology

3. Bacterial stains: preparing and fixing bacterial smears for staining; steps in preparing a Gram stain; differential stain to demonstrate bacterial spores; negative stain to demonstrate bacterial capsules; cell morphology and arrangement
4. Controlling microbial growth by chemical means
5. Controlling microbial growth by physical means
6. Controlling microbial growth by heat
7. Bacterial metabolism and physiology
8. Fermentation and respiration
9. Simulated epidemic; principles of infection control; stages in the development of infectious disease
10. Caries susceptibility tests
11. Oral protozoa and yeast
12. Prokaryotic cell structure and function
13. Host - parasitic interactions and relationships; virulence factors; nonspecific host defence mechanisms; acquired immune response
14. Oral Flora and the process of plaque formation
15. Viruses: structure, replication; Hepatitis B, HIV
16. Infection control in dentistry: universal precautions, protection of both patient and dental personnel, cross infections of importance