I. CATALOG INFORMATION

- A. Discipline: <u>MICR</u>OBIOLOGY
- B. Subject Code and Number: MICR M122
- C. Course Title: Independent Study-Microbiology
- D. Credit Course units:

Units: 0.5 - 3Lecture Hours per week: 0Lab Hours per week : 1.5 - 9

Variable Units :	No

E. Student Learning Hours:

Lecture Hours:

Classroom hours: _____

Laboratory/Activity Hours:

Laboratory/Activity Hours <u>26.25 - 1</u>57.5

Total Combined Hours in a 17.5 week term: <u>26.25 - 157.5</u>

- F. Non-Credit Course hours per week
- G. May be taken a total of: X 1 2 3 4 time(s) for credit
- H. Is the course co-designated (same as) another course: No X Yes If YES, designate course Subject Code & Number:
- I. Course Description:

Allows independent study for students who wish to extend their knowledge of a particular area of Microbiology through research and study. Utilizes an approved independent project. Includes one-on-one work with instructor.

J. Entrance Skills

*Prerequisite:	No Yes X Course(s)
Completion of one course in	n Microbiology and instructor approval.
*Corequisite:	No X Yes Course(s)
Limitation on Enrollment:	No X Yes
Recommended Preparation:	No X Yes Course(s)
Other:	No X Yes

K. Other Catalog Information:

Interested students should contact a Microbiology instructor for assistance in developing a contract for learning about a specific topic. May be taken for a maximum of 6 units. Formerly MICR M22A/B. Transfer credit: CSU; UC (determined after admission).

II. COURSE OBJECTIVES

Upon successful completion of the course, a student will be able to:

		Methods of evaluation will be consistent with, but not limited by, the following types or examples.
1	apply the knowledge acquired to other aspects of Microbiology.	Successful completion of a course project, i.e., portfolio, paper, performance, presentation, or research. Evaluation methods will be determined by the instructor in consultation with the student.
2	formulate statements designed to assess the applicability of their knowledge to other related topics.	Successful completion of a course project, i.e., portfolio, paper, performance, presentation, or research. Evaluation methods will be determined by the instructor in consultation with the student.
3	analyze new information, practices, or research in the Microbiology discipline and utilize those findings in further research or creative projects.	Successful completion of a course project, i.e., portfolio, paper, performance, presentation, or research. Evaluation methods will be determined by the instructor in consultation with the student.

III. COURSE CONTENT

Estimated %	Торіс	Learning Outcomes		
Lecture (must total 100%)				
Lab (must total 100%)				
100.00%Project content and specific topics will be determined by the student in consultation with the supervising faculty member.				

IV. TYPICAL ASSIGNMENTS

A. Writing assignments

Wri	Writing assignments are required. Possible assignments may include, but are not limited to:					
1	projects to be determined in conversations between the instructor and the student.					
2	development of project-related documents: essays, term projects, library research, and literature reviews.					

B. Appropriate outside assignments

Appropriate outside assignments are required. Possible assignments may include, but are not limited to:

projects to be determined in conversations between the instructor and the student.

C. Critical thinking assignments

Critical thinking assignments are required. Possible assignments may include, but are not limited to:

1 projects to be determined in conversations between the instructor and the student.

V. METHODS OF INSTRUCTION

Methods of instruction may include, but are not limited to:

Distance Education – When any portion of class contact hours is replaced by distance education delivery mode (Complete DE Addendum, Section XV)

Lecture/Discussion

X	Laboratory/Activity
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X Other (Specify)

The specific methods to be used will be determined by the supervising faculty member in consultation with the student

X Optional Field Trips

Required Field Trips

VI. METHODS OF EVALUATION

Methods of evaluation may include, but are not limited to:

X Essay Exam	Classroom Discussion	X Skill Demonstration
Problem Solving	X Reports/Papers/	X Participation
Exam X Objective Exams	Journals X Projects	X Other (specify)

Specific evaluation methods will be determined by the instructor in consultation with the student.

VII. REPRESENTATIVE TEXTS AND OTHER COURSE MATERIALS

Specific books, articles, films, etc. used will be determined by the supervising faculty member in consultation with the student.

VIII. STUDENT MATERIALS FEES



IX. PARALLEL COURSES

College	Course Number	Course Title	Units
Chabot College	MICR 29	Independent Study	0.5-2
El Camino College	MICRO 99	Independent Study	1-3
Modesto College	MICRO 199A	Independent Study/Special Problems	1

X. MINIMUM QUALIFICATIONS

Courses Requiring a Masters Degree:

Master's degree in any biological science OR bachelor's degree in any biological science AND master's degree in biochemistry, biophysics, or marine science OR the equivalent.

XI. ARTICULATION INFORMATION

- A. Title V Course Classification:
 - 1. This course is designed to be taken either:

Pass/No Pass only (no letter grade possible); or

X Letter grade (P/NP possible at student option)

2. Degree status:

Either X Associate Degree Applicable; or Non-associate Degree Applicable

B. Moorpark College General Education:

1. Do you recommend this course for inclusion on the Associate Degree General Education list?

Yes: No: X If YES, what section(s)?

- A1 Natural Sciences Biological Science
- A2 Natural Sciences Physical Science
- B1 Social and Behavioral Sciences American History/Institutions
- B2 Social and Behavioral Sciences Other Social Behavioral Science
- C1 Humanities Fine or Performing Arts
- C2 Humanities Other Humanities
- D1 Language and Rationality English Composition
- D2 Language and Rationality Communication and Analytical

Thinking

- E1 Health/Physical Education
- E2 PE or Dance
- F Ethnic/Gender Studies
- C. California State University(CSU) Articulation:
 - 1. Do you recommend this course for transfer credit to CSU? Yes: X No:

oorpark	- MICR	R M122						
	2.	Education	list?	mend this co S, which ar		clusion on th	ne CSU Ge	neral
		A1 🗌	A2	A3 🗌	B1 🗌	B2	В3 🗌	B4 🗌
		C1	C2	D1	D2	D3 🗌	D4	D5
		D6	D7 🗌	D8	D9 🗌	D10	E	
D.	Unive	ersity of Cal	lifornia (UC) Articulatio	n:			
	1.	Do you rea	commend t	his course f	or transfer t	to the UC?	Yes: 🗌 N	No: X
	2.		•	mend this co urriculum (I		e Intersegm Yes: 🗌 No	ental Gene : X	ral
			English C Critical Th	h Commun composition hinking-Eng munication		sition		
		IGETC Area 2: Mathematical Concepts and Quantitative Reasoning Mathematical Concepts IGETC Area 3: Arts and Humanities Arts						<u>J</u>
			Anthropol Economic Ethnic Stu Gender S Geograph History Interdisci Political S Psycholog	I and Behav logy and Arc s udies tudies tudies by olinary, Soc Science, Go	chaeology ial & Behav vernment &	rioral Scienc Legal Instit		
			Physical S quence) Physical S Biological	Science Lat Science Lec	o or Physica	nces (mark a al Science L non-sequenc	ab only (no	

Physical Science Courses

Physical Science Lab or Biological Science Lab Only (non-

sequence)

Biological Science Courses

Biological Science Lab course

First Science course in a Special sequence

Second Science course in a Special Sequence

Laboratory Activity

Physical Sciences

IGETC Area 6: Language other than English

Languages other than English (UC Requirement Only)

U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)

U.S. History, Constitution, and American Ideals (CSU Requirement ONLY)

XII. REVIEW OF LIBRARY RESOURCES

A. What planned assignment(s) will require library resources and use?

The following assignments require library resources: Research projects using the Library's print and online resources.

B. Are the currently held library resources sufficient to support the course assignment?

YES:	Х	NO:	
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If NO, please list additional library resources needed to support this course.

XIII. PREREQUISITE AND/OR COREQUISITE JUSTIFICATION

Requisite Justification for Completion of one course in Microbiology and instructor approval.



X

A. Sequential course within a discipline.

B. Standard Prerequisite or Corequisite required by universities.

C. (Corequisite	is lin	ked to	o con	npanion	lecture	course.
		-					



D. Prerequisite or Corequisite is authorized by legal statute or regulation. Code Section: _____



E. Prerequisite or Corequisite is necessary to protect the students' health and safety.

F. Computation or communication skill is needed.

G. Performance courses: Audition, portfolio, tryouts, etc. needed.

XIV. WORKPLACE PREPARATION

MICR M122: Not Applicable

- XV. DISTANCE LEARNING COURSE OUTLINE ADDENDUM MICR M122: Not Applicable
- XVI. GENERAL EDUCATION COURSE OUTLINE ADDENDUM MICR M122: Not Applicable
- XVII. STUDENT MATERIALS FEE ADDENDUM MICR M122: Not Applicable
- XVIII. REPEATABILITY JUSTIFICATION TITLE 5, SECTION 55041

MICR M122: Not Applicable

XIX. CURRICULUM APPROVAL

Course Information: Discipline: MICROBIOLOGY

Discipline Code and Number: MICR M122

Course Revision Category: Outline Update

Course Proposed By:

Originating Faculty Michael Trainor 12/18/2015

Faculty Peer: _____

Curriculum Rep: _____

Department Chair: Jazmir Hernandez 12/21/2015

Division Dean: _____

Approved By:

Curriculum Chair: Jerry Mansfield 02/06/2016

Executive Vice President: Lori Bennett 02/01/2016

Articulation Officer: _____

Librarian:

Implementation Term and Year: Spring 2016

Approval Dates:

Approved by Moorpark College Curriculum Committee: 02/02/2016

Approved by Board of Trustees (if applicable):

Approved by State (if applicable): 02/26/2016

Course Outline moorpark - MICR M122