

Lock Haven University
University Curriculum Committee

APR 20 1995

UNDERGRADUATE COURSE/PROGRAM COVER SHEET

Course/Program Title: B1013N0
MICROBIOLOGY - Change in lab hours from 2 to 3 clock hours.

<i>Tim P. Goho</i>	3/16/95	<input checked="" type="radio"/> Approve	<input type="radio"/> Disapprove
Signature: Department Chairperson	Date	Recommendation	

Following departmental approval, the Department Chairperson should deliver to the appropriate College Curricular Subcommittee: this Course/Program Cover Sheet and the necessary number of copies of the proposal. Course 501's bypass the College Curricular Subcommittee and go directly to the UCC.

<i>Wesley DeLeon</i>	3/17/95	<input checked="" type="radio"/> Approve	<input type="radio"/> Disapprove
Signature: Chairperson, College Curricular Subcommittee	Date	Recommendation	

Following the College Curricular Subcommittee evaluation, the Department Chairperson should deliver to the University Curriculum Committee: this Course/Program Cover Sheet and 30 copies of the proposal.

<i>Clay R. Kleckley</i>	4-18-95	<input checked="" type="radio"/> Approve	<input type="radio"/> Disapprove
Signature: Chairperson, University Curriculum Committee	Date	Recommendation	

Following University Curriculum Committee evaluation, the UCC Chairperson should send: this Course/Program Cover Sheet and one copy of the proposal to the Vice President for Academic Affairs.

<i>Mary W. Purcell</i>	5/16/95	<input checked="" type="radio"/> Approve	<input type="radio"/> Disapprove
Signature: Vice-President for Academic Affairs	Date	Recommendation	

<i>Greg Beantuller</i>	5/17/95	<input checked="" type="radio"/> Approve	<input type="radio"/> Disapprove
Signature: President	Date	Recommendation	

Following administrative approval, the Vice President for Academic Affairs will send a copy of this completed cover sheet to the following:

- Chairperson of the UCC
- Chairperson of the College Curricular Subcommittee
- Chairperson of the Department of Origin
- Academic Dean of the College of Origin
- Associate Dean of Administration
- Coordinator of Academic Advisement
- Computer Services Director
- Assistant to the VP's

xi: Mr Goho
Mr Kleckley
Mr Gross
Ms Reitz
 Sent 5/17/95 dr
 Sent 5/14/95

TO: Dr. Tim Yoho
Mr. Nelson DeLavan
Dr. Clay Kleckley
Dr. Janet Gross
Ms. Jill Reitz

FROM: Denise Shoemaker *Denise*
Office of the Vice President for Academic Affairs

DATE: August 14, 1995

In preparing for updates to the catalog, I realized that BIOL340, Microbiology, had been assigned a number of BIOL348 when it came over for approval of the additional clock hour of lab. The course number should not be changed to BIOL348, but should remain BIOL340.

Any questions or concerns, please call me on extension 2576.

Thank you.

*Denise
8/14/95
dl*

Date: Thu, 10 Aug 1995 09:24:40 -0400 (EDT)
From: "Tim P. Yoho" <tyoho@eagle.lhup.edu>
To: Denise Shoemaker <dshoemak@eagle.lhup.edu>
Subject: Re: your mail

I agree with your reasoning. Microbiology should remain as BIOL 340.
Sending blue cover to those concerned is probably the path of least
resistance. Thanks.

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Tim P. Yoho, Chair/Professor | ALL BUGS ARE INSECTS | Amateur Radio  
Department of Biology | BUT NOT ALL INSECTS | WA3D  
Lock Haven University | ARE BUGS | (717)893-2391  
Lock Haven, PA. 17745 | | tyoho@eagle.lhup.edu  
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On Mon, 7 Aug 1995, Denise Shoemaker wrote:

>
> In preparing for updates to the catalog, I realized that BIOL340 had been
> assigned a number of BIOL348 when it came over for approval of
> the additional clock hour of lab. The course number should not be
> changed to BIOL348 but should remain BIOL340.
>
> Do you want me to recopy the blue cover sheet and mail to N. DeLavan,
> Chair of College Curricular Subcommittee; C. Kleckley, Chair of UCC;
> and Dr. Gross. I gave Jill Reitz a copy so the CARS system would not be
> changed.
>
> Please let me know what you think.
>
> Thanks,
>
> Denise
>

Shoemaker

TO: University Curriculum Committee
FROM: Department of Biological Sciences TOY
DATE: 3/23/95
RE: Change in Clock Hours of Microbiology BIOL340

We request a change in the clock hours of Microbiology BIOL340. Under Introductory Information the Clock Hours reads "3 hrs. lecture; 2 hrs. lab per week. We request a change to 3 hrs. lecture; 3 hrs. lab per week.

When this course was submitted for approval by John Zaharis (retired) in 1991 the department did not realize that the lab component consisted of two hours and not three.

The course has been taught by a part-time or full-time faculty member since Zaharis retired and the question of lab time did not come up until we advertised for a tenure track faculty member to fill Zaharis's position. In discussions of how the micro should be taught, the temporary replacement, Dale Ellen Seeley, indicated that two hours of lab per week are not sufficient. She said that students are working a 3rd hour to finish the assignments required by the syllabus. Since Dr. Zaharis moved out of the state he is not available to discuss why this course was submitted with only a two hour lab. We can only assume he was trying to free up hours so that our new Principles of Biology could be offered.

By comparison to our other offerings for the major, all of our courses including 3sh credit hour courses (Micro is 4sh) have a three hour lab. We therefore request that Microbiology BIOL340 have the lab component changed from 2 to 3 clock hours per week. This change is reflected in the Introduction and under "C" Major Unit and Time for the Laboratory.

We also intend to revise the content of this syllabus when the new faculty member is hired, but this will be done in the next academic year.

SYLLABUS

Approved 5/91
Revision 2/95

Biol 340 Microbiology

I. Introductory Information:

- A. Department Name: Biological Sciences
- B. Department Catalog Number: Biol340
- C. Course Title: Microbiology
- D. Credit hours: 4 s.h.
- E. Clock Hours: 3 hrs. lecture; 3 hrs. lab per week
- F. Prerequisites: Biol 106, 107; Chem 120, 121

II. Course Description:

A study of the prokaryotic cells, their anatomy, physiology, taxonomy, mode of transmission, effects on human health, and treatment and epidemiology of disease. The study of the morphology, mode of replication of viruses and their role in the production of disease. Microbial genetics and genetic engineering will also be studied.

III. Exposition:

A. Objectives: The student will:

1. Learn the history of bacteriology and virology.
2. Learn the classification, morphology, and physiology of bacterial and the classification, morphology, and methods of replication of viruses.
3. Develop the laboratory skills required for proper and safe study of bacteria and viruses.
4. Learn about the nature of disease, including methods of transmission, prevention, and treatment.
5. Learn the nature of the antigen-antibody reaction and its significance in immunity and diagnosis of disease.
6. Contrast the kinds of immunity.
7. Learn the etiological agent, method of transmission, clinical symptoms, means of identification, and recommended treatment of some disease producing bacteria and viruses of the human organ system.

B. Activities and Requirements:

1. The student is expected to attend all laboratory sessions and to turn in all laboratory reports at the end of each laboratory exercise. Attendance at all scheduled lectures is voluntary.

but strongly recommended. Audio-visual aids will be employed in lectures to clarify subject matter.

2. Each student will be expected to provide a glass marking pencil and colored pencils.
3. Each student will be expected to correctly identify a bacterial unknown to species using Bergey's Manual of Systematic Bacteriology.
4. The student will take quizzes and tests according to major units (organized under C) at designated times.

C. Major Units and Time

LECTURE

1. Introduction to microbes	2 hrs
2. Structure and Function of bacteria	2 hrs
3. Bacterial growth. (Laboratory cultivation)	2 hrs
4. Bacterial systematics	1 hr
5. Viruses	3 hrs
6. Molecules of Life	1 hr
7. Metabolic dynamics of life	3 hrs
8. Microbial genetics	3 hrs
9. Control of microorganisms	2 hrs
10. Antibodies and chemotherapy	2 hrs
11. Host-parasite interactions	3 hrs
12. Specific defenses: immune response	2 hrs
13. Harmful aspects of the immune response	2 hrs
14. Microbial diseases of the skin and eyes	2 hrs
15. Microbial diseases of the nervous system	2 hrs
16. Microbial diseases of the cardiovascular and lymphatic systems	2 hrs
17. Microbial diseases of the respiratory system	2 hrs
18. Microbial diseases of the digestive system	2 hrs
19. Microbial diseases of the urinary and genital systems	2 hrs
20. Epidemiology	2 hrs
21. Quizzes/tests	3 hrs

LABORATORY

1. Bright field microscopy; measurements, blood groups WBC count	3 hrs
2. Bacteria; negative staining, smear preparation	3 hrs
3. Simple, capsular, Gram stains	3 hrs
4. Spore, acid-fast, flagella staining	3 hrs
5. Motility determination	3 hrs
6. Pure culture techniques; cultivation of anaerobes	3 hrs
7. Lethal effects; bacterial growth; pH; UV light effects	3 hrs
8. Antimicrobial sensitivity; stock culture	3 hrs
9. Unknowns: morphology; oxygen requirements	3 hrs
10. Cultural characteristics of unknown	3 hrs

11. Bio-oxidations of unknowns	6 hrs
12. Hydrolysis	3 hrs
13. Miscellaneous testing	3 hrs
14. Quizzes	3 hrs

D. Materials and Bibliography:

1. Required text and laboratory manual to be selected
2. Bibliography

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IV. Standards:

Students will be evaluated on the basis of their completion of course requirements and their demonstrated ability of meet course objectives.