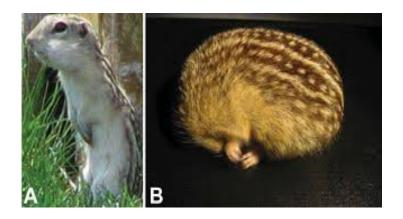
University of Wisconsin-Madison

Department of Bacteriology

MICROBIOLOGY 551

The capstone experience in microbiology

2017



Ictidomys tridecemlineatus

Thirteen-lined ground squirrel

Dr. Melissa Christopherson Dr. Robin Kurtz (Course Coordinator)

Microbiology 551 Schedule Spring 2017*

| Period | Date | Day | Bench Work | Reading/Writing | Lecture |
|--------|---------|-----|--|--|--|
| 1 | 1/18-19 | W/R | Streak for Proficiency Test (PT) organism onto NA plate | Form teams and determine research sub- topic. Read a paper on sub- topic by next period. | Introductions, expectations, organization, introduction of capstone project. |
| 2 | 1/23-24 | М/Т | Proficiency tests | Team discussion and selection of target microbes and team presentation paper | Proposal and presentation guidelines |
| 3 | 1/25-26 | W/R | Proficiency tests/Media Prep | Discuss outlines and presentations | |
| 4 | 1/30-31 | M/T | Proficiency tests/Media Prep | | Group 1 and 2 presentation |
| 5 | 2/1-2 | W/R | Proficiency tests/Begin inoculations | Proposal outline due Feb 2 | Group 3 and 4 presentation |
| 6 | 2/6-7 | M/T | Proficiency tests /Isolations | | Group 5 and 6 presentation |
| 7 | 2/8-9 | W/R | Proficiency tests due/Isolation | | Group 7 and 8 presentation (or spill-over) |
| 8 | 2/13-14 | M/T | | Identify a paper on sub-topic to present to class as a 5' chalk talk | Chalk talk presentation guidelines |
| 9 | 2/15-16 | W/R | | | MiSeq lecture, study sample prep guidelines |
| 10 | 2/20-21 | M/T | | | Chalk talk presentations |
| 11 | 2/22-23 | W/R | -Lab Work to isolate member of microbiota | MiSeq quiz (in class) | Chalk talk presentations |
| 12 | 2/27-28 | M/T | DNA isolations PCR | | Chalk talk presentations |
| 13 | 3/1-2 | W/R | Gel Purify | | Chalk talk presentations |
| 14 | 3/6-7 | M/T | | Proposal draft due in class | Peer review (PR due 3/10) |
| 15 | 3/8-9 | W/R |] | Team work on Problem set | Bioinformatics |
| 16 | 3/13-14 | M/T | _ | Team work on Problem set | Bioinformatics |
| 17 | 3/15-16 | W/R |] | Team work on Problem set | Bioinformatics |
| | 3/20-24 | M-F | | SPRING BREAK | |
| 18 | 3/27-28 | M/T | | Proposal final draft due 3/29 | Bioinformatics |
| 19 | 3/29-30 | W/R | Prep of Miseq samples | Team work on Problem set | |
| 20 | 4/3-4 | M/T | MiSeq sequencing | Bioinformatics quiz in class | |
| 21 | 4/5-6 | W/R | | | |
| 22 | 4/10-11 | M/T | Informatics | Teamwork on posters | Poster prep guidelines |
| 23 | 4/12-13 | W/R | Informatics | Teamwork on posters | Poster presentation |
| 24 | 4/17-18 | M/T | Informatics | Poster draft due 4/18 | Bioethics paper guidelines |
| 25 | 4/19-20 | W/R | Posters | | Bioethics |
| 26 | 4/24-25 | M/T | | Poster final copy due 4/24 | Bioethics |
| 27 | 4/26-27 | W/R | | | Bioethics |
| | 4/28 | | | POSTER SYMPOSIUM | |
| 28 | 5/2-3 | M/T | Evaluation of team members | Bioethics paper due 5/3 | Bioethics and class summary |
| 29 | 5/4-5 | W/R | | GRILL OUT | |

Exact activities and dates subject to modifications by instructor and whims of science, throughout the semester

Instructors

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Assignments

Assignments will be placed in the Drop Box at Learn@UW by 11:30 PM on the date the assignment is due unless otherwise stated as an in-class assignment. Guidelines for assignments will be given in class at the times designated in the class schedule. Please contact the instructor with any questions concerning assignment requirements before the assignment deadline. Contact the instructor within one week after assignment deadline with any concerns about evaluation or feedback.

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| Assignment | Points | Due Date |
|---------------------------------------|------------------------|----------------------------|
| Proposal Outline | 10 | Feb 2 |
| Formal presentation | 20 | Jan. 30-Feb. 9 |
| Proficional tasts (4) | 30 (see break down | Completed by Feb, 8-9 |
| Proficiency tests (4) | in description of PTs) | (In class) |
| Chalk talk presentation | 20 | Feb 20- March 2 (In class) |
| MiSeq quiz | 20 | Feb 22-23 (In class) |
| Proposal Draft | 40 | March 6 - 7 (In class) |
| Peer review | 5 | March 10 |
| Proposal Final | 100 | March 29 |
| Informatics quiz | 25 | April 3-4 (In class) |
| Poster draft | 25 | April 18 |
| Poster final version | 50 | April 24 |
| Bioethics Analysis Paper | 25 | May 3 |
| Final Notebook: Hours, Evaluation of | 100 | May 4-5 |
| effort by instructor, Peer evaluation | | |
| Poster presentation | 10 | April 28 (at symposium) |
| Random notebook checks | 20 (4 x 5 pts. each) | TBD |
| Class Participation and attendance | 80 | - |
| Total Points | 580 | |

Grading scale:>92=A, 90-91.9=AB, 82-89.9=B, 78-81.9=BC, 70-77.9=C, 62-69.9=D, F<61.9