Course Rubric, Term

SYLLABUS

MCB 251 SP24-Molecular Genetics, 2.0 credit hours semester

Instructor/Instructional Team

Name: Nicholas Kirchner (Life Science Teaching Specialist)
Office Location: 217a Burrill Hall
Contact Information: kirchner@illinois.edu, 217-244-4906

Class Meeting Schedule

- Lab will meet in person once a week (M-F) the exact and time is to be selected by the student. Lab sections last 3 hours and 50 minutes and are led by a Graduate Teaching Assistant.
- Office hours will be held in the MCB Learning Center, 2 hours a week (M-F) by graduate teaching assistants.

Course Overview and Description

MCB 251 is a laboratory course that compliments MCB 250 and emphasizes a range of experimental approaches to questions most often investigated using experimental techniques. Each section meets weekly in the laboratory for 4 hours.

Students attend one lab section each week delivered by graduate teaching assistants from the Department of Microbiology and Cell and Developmental Biology.

Course Prerequisites, Requirements met (general education, major, minor)

Prerequisite: Concurrent or prior enrollment in MCB 250, or consent of instructor. Credit: 2 hours.

Student Learning Outcomes (a list of at least 3)

Content: Overall course objectives:

1. Characterize your plasmid.
2. Quantify your plasmid's concentration; devise a restriction map for your plasmid, identify unique primer sequences that can be used to confirm the identity of plasmid using PCR.
3. Conduct scientific inquiry.
4. Demonstrate proficiency in experimental design.
5. Analyze and interpret data sets.
6. Draw conclusions from overall data compilation.

Course Techniques:

- Plasmid purification
- Plasmid sample quantification using gel electrophoresis
- Gel electrophoresis
- Primer Design
- PCR analysis

Course Modules:

1. Plasmid purification
2. Gel electrophoresis/ Plasmid Quantification/Plasmid Mapping
3. Primer Design/PCR/Gel electrophoresis

Text/Materials Information

"MCB 251 Laboratory Exercises: Experimental Techniques in Molecular Biology, Spring 2024"
N. Kirchner, editor
Stipes Publishing

Course Website, Course Tools

Course Website: www.life.illinois.edu/mcb/251
Course LMS: www.LON-CAPA.illinois.edu
Zoom: Used to synchronously deliver weekly lab sessions

Grading Information and Breakdown

1 Laboratory Midterm Exam	150
Final Exam	150
Lab Activity Sheets (5 @ 30 points each, drop lowest)	120
Lab Reports	240
LON-CAPA Post Lab Assignments (12 @ 20 points each, drop 2 lowest)	200
LON-CAPA Unknown Identification Assignments	90
End of Semester Presentation	50

Total 1000 points

Letter Grade	Point Ranges	Grade Point Value
A+	1000–920	4.000
A	919–883	4.000
A-	882–850	3.667
B+	849–817	3.333
B	816–783	3.000
B-	782–750	2.667
C+	749–717	2.333
C	716–683	2.000
C-	682–650	1.667
D+	649–617	1.333
D	616–583	1.000
D-	582–550	0.667
F	549–0	0.000

Course Policies

Contacting MCB Course Personnel:

- MCB course personnel are more than happy to assist students.
- Emails to instructors, TAs, or course coordinators will only be answered if they come from an @illinois.edu account. We will only use this account in order to protect your educational information and profile. As a student, please remember that when you email a staff member, it is important to include all pertinent information so that we can assist you in the most efficient and effective manner possible. This information includes:
    - The course rubric in the subject line
    - Your full first and last name
    - Your NetID (the first part of your illinois.edu email account)
    - Your UIN (9 digit number that can be found on your ICard)
    - The course that you are concerned about (the course personnel often work with multiple courses)
    - Your section letter/number
    - The previous email "thread" or previous communicated information pertinent to the situation
- Your cooperation will help us respond much more quickly to your concerns.

Policies:

- Unfamiliarity with policies is not a defense for not knowing what they cover.

Adding the Course after the Semester Start:

- We understand that the University has an add deadline 10 days into the semester, but the University lets individual courses and/or programs determine their policies for late adds. We feel that students who choose to add a course late do so at their own discretion with knowledge that there may be points lost in the process.

Religious Observances and Practices:

- We happy to accommodate students' absences do to religious observances. Students who know they will miss course are required to submit the Request for Accommodation for Religious Observances Form (which can be found at www.odos.illinois.edu/.../Religious_Observance_Accommodation_Request_ Form.docx) to their instructors and the Office of the Dean of Students requesting accommodation by the end of the second week of the course if the dates are known. If dates are not known at the start of the semester please provide them to the instructor as soon as possible once the information becomes available. Information about accommodations can be found in the Student Code: http://studentcode.illinois.edu/.

DRES Accommodations:

- We are committed to providing a learning environment where our students can succeed. If you require special accommodations, please contact us and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, you may visit 1207 S. Oak Street, Champaign, call 217.333.4603, or email disability@illinois.edu. We will try to meet all accommodations once the process has started. Please note that accommodations are not retroactive to the beginning of the semester, but begin the day you contact your professor, instructor or coordinator with a current letter of accommodation from DRES.
- If a student believes that they need DRES accommodations, they should contact DRES at disability@illinois.edu.

Class Absences:

- Regular class attendance is expected of all students at the University. (http://odos.illinois.edu/studentAssistance/absence/revised_code.asp)
- If you find yourself ill, you must submit confirmation of a visit with a medical practitioner within 24 hours of your absence. The confirmation cannot be provided by a relative, even if the relative is a practitioner.
- The Office of the Dean of Students will only provide informative letters to instructors for protracted illness of 3 or more days, certain emergencies and to be present during the

serious illness of immediate family members (parents, legal guardian, spouse/partner, siblings, children, or grandparents). These letters do not excuse you from class but merely provide information for the instructor to consider with regard to excusing the absence and permitting make-up work. Students must request absence letters from the Office of the Dean of Students after the student has returned to class but not more than 10 business days after the last date of absence.

- Absences that may be excused without a letter include circumstances beyond the student's control such as medical treatment, surgery related to prolonged illness or injury, pregnancy, legal matters, citizenship or naturalization processes, or acts of nature which cause destruction to a primary residence or disrupt air travel. All will require documentation.
- Absences that may also be excused without a letter include a conference or job, graduate or professional school interviews, though a best effort should be made to schedule these events to minimize class attendance disruption. All will require documentation.
- Absences planned for the items listed in previous bullet point must be communicated to your instructor or course coordinator at least two weeks in advance of the absence. Failure to do so may result in the loss of opportunity to reschedule the missed class period and the portion of the grade associated with this class period.
- Absences that will not be excused include family events such as reunions or weddings, or presence during serious illness of extended family members (aunt, uncle, niece, nephew, or cousin).
- Unplanned absences may result in the loss of opportunity to reschedule the missed class period and, therefore, the portion of the grade associated with this class period.
- Absences will be handled according to individual course policy.

Exam Absences:

- If you must miss an exam due to unforeseen circumstances, you are required to contact your instructor or course coordinator within 24 hours of the absence. You will then have 48 hours from the absence in which to submit documentation to your instructor or course coordinator. You must also submit an online Absence Form if one is available on your course website. Course personnel will evaluate documentation and decide whether or not there will be an option to compensate for the missed exam through either a make-up exam or proration. Failure to follow this procedure will result in a zero for the exam.
- If you find yourself ill, you must submit confirmation of a visit with a medical practitioner within 24 hours of your absence. The confirmation cannot be provided by a relative, even if the relative is a practitioner.
- If you must miss an exam for a conference or job, graduate or professional school interviews, the exam may be prorated. A best effort should be made to schedule these events around exams. You will need to be mindful that only one exam may be prorated in a semester for any and all absences. All will require documentation.