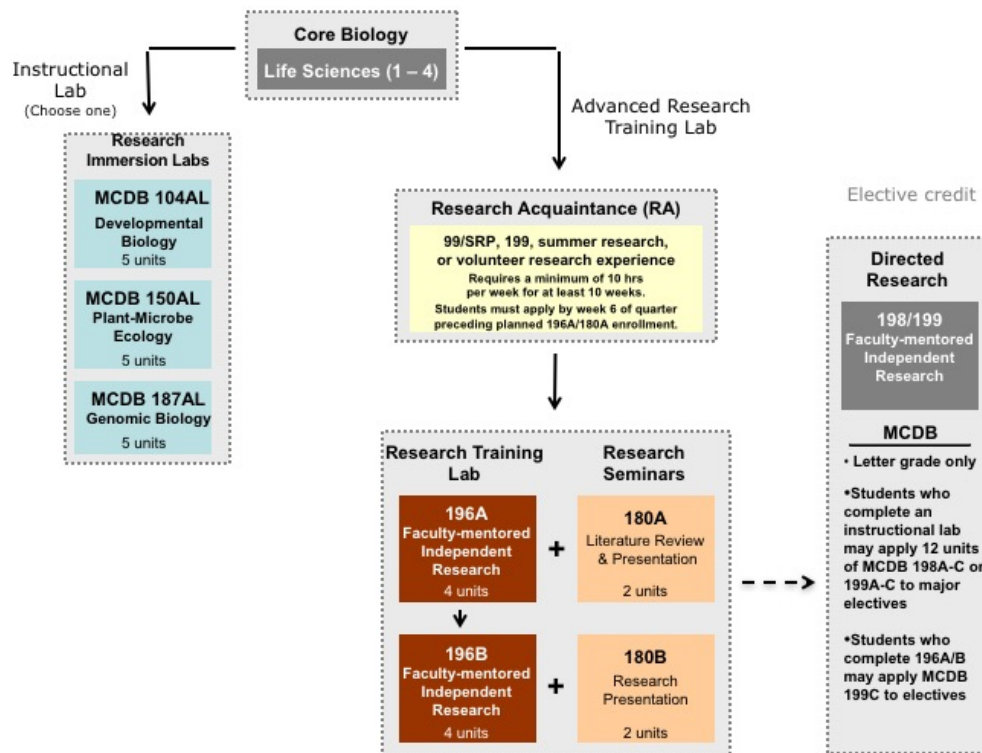


# MCDB Laboratory Requirement

## Application and Enrollment Instructions for MCDB 196 A/B



**NOTE:** Fourth year students who have NOT fulfilled their laboratory requirement and plan to take **MCDB 198** (departmental honors) research courses this year may use this application along with their MCDB 198 contract. PLEASE CONTACT THE MCDB UNDERGRADUATE COUNSELOR FOR DETAILED INSTRUCTIONS.

Students who plan to complete their MCDB Laboratory requirement by completing two consecutive quarters of Faculty mentored independent research (Research Apprenticeship 196A and Research Apprenticeship 196B) with concurrent enrollment in the research seminars MCDB 180A and 180B must apply for enrollment as detailed below.

### What's the difference between MCDB 199, 199A-D, 198A-D and the 196's?

Because these courses (**196A/B, 180A/B**) are used to fulfill the MCDB major's laboratory requirement, they have been designed to ensure that students learn how to build testable hypothesis, propose experiments, perform experiments and analyze research data, as well as record information troubleshoot experiments.

### Advance Research Training Laboratory - Eligibility Requirements

All students must:

- ✓ have completed Life Science 3, 4 and 23L, OR LS 7A, 7B, 7C, 23L. and 107;
- ✓ be a third-year or fourth-year student by the quarter you start 196A;
- ✓ have a Major GPA of 3.0 or higher (If you do not have a major GPA when applying, then your prep GPA must be 3.0 or higher);
- ✓ a **Research Acquaintance (RA)** experience prior applying for 196A/180A. See below for more information regarding the RA experience

## **Faculty Mentor Information – Which Faculty members are “approved” and how do I start?**

Students need to **take the initiative** in the search for a faculty mentor, taking the time necessary to consider multiple faculty members and their research areas. To ensure a good match with a faculty mentor, students are encouraged to follow the steps below to find a suitable RA experience.

- 1- **Students must select a faculty advisor in MCDB, or a faculty member from the *MCDB Eligible Faculty Research Sponsors* list.** Browse the online faculty research activities on the MCDB website, (<http://www.mcdb.ucla.edu/faculty.php>), or obtain a copy of the *MCDB Eligible Faculty Research Sponsors* list from the MCDB Undergraduate Office.
- 2- Send an e-mail to the faculty member doing research that interests you most to **request an interview** to discuss your intention of doing research in his/her laboratory. Most students will need to contact up to 10 different faculty members to find a position in a laboratory for a RA experience.

## **The Research Acquaintance (RA)**

The RA requires a **minimum of 10 hrs per week for at least 10 weeks** and may consist of any one of the following: SRP 99 (2 units, P/NP), 199 (Letter grade only), or volunteer research experience in a lab approved by MCDB at least a quarter before applying for 196A/B.

## **196A/B Research Apprenticeship - Application**

Eligible students must apply for approval by the departmental curriculum committee to enroll in MCDB 196A. Approved students who complete the independent Research Apprenticeship courses (196A/B and 180A/B) will not be required to enroll in an instructional laboratory course (e.g., MCDB 104AL, MCDB 105AL, or MCDB 187AL).

All the following forms must be submitted to the MCDB Undergraduate Office by 5:00 PM on Friday of 6<sup>th</sup> week of the **Research Acquaintance** quarter:

- 1- **Undergraduate Researcher Acknowledgement Form**
- 2- **MCD BIO 196A contract (See instructions below)**
- 3- **Safety Training Certificate (proof of EH&S safety course or refresher taken within past year)**
- 4- **Research Project Proposal**
- 5- **Faculty Mentoring Agreement**

Your application materials will be reviewed by the departmental curriculum committee. Students and faculty advisors will be notified of approval status within 2-3 weeks of submitting an application. It is advised that students have a back-up plan for the subsequent quarter (i.e., enroll in classes in case they are NOT approved for the Research Apprenticeship courses).

If the application is approved, then the MCDB Undergraduate Advisor will enroll the student in MCDB 196A and MCDB 180A.

## **Advanced Research Training Lab credit – How does it apply to the MCDB major requirements?**

- MCDB 196A (4 units) – will be applied toward the 20 units of electives for the major (either the MCDB or outside elective category – whichever works best for you.)
- MCDB 196B (4 units) – will be applied to the MCDB Laboratory Requirement
- MCDB or MIMG 180A/B (2 units each) – will be applied toward the 20 units of electives for the major (either the MCDB or outside elective category – whichever works best for you.)

## **Research Apprenticeship (MCDB 196A/B)**

### **MCDB Research Contract Instructions**

Please follow the directions below. **IF YOU FOLLOW THE DIRECTIONS THAT ARE ON THE CONTRACT WEBSITE INSTEAD OF MY INSTRUCTIONS YOU WILL DO MORE WORK THAN NECESSARY TO ACCOMPLISH THIS TASK!!!**

Step 1: Logon to MyUCLA.

Step 2: Click on **Contract Courses** (listed under MyUCLA Features).

Step 3: From the **My Contract Courses** page, you can view the status of previously created contracts as well as create a new contract. Select **Submit a New Contract**.

Step 4: Select **YEAR and TERM**. Below the year and term, it asks you to **Please select the course you wish to enroll in**. Select **Research Apprenticeship (196)**. NOTE: You will select the letter "A" later in the process for the 196A contract.

Step 5: Read the enrollment instructions, which is specific to the course number you have selected, and then click **Continue**. Remember that the instructions on MyUCLA may differ from these instructions. Follow these printed instructions.

Step 6: Select the subject area for the course – **MCD BIO**, click **Continue**.

Step 7: Choose a course number. There is a drop down box. Select **196A**. Click **Continue**.

Step 8: **Choose a faculty mentor**. (Please note: This means you will need to know how to properly spell your research sponsor's name before you begin the contract.) Click **Continue**.

Step 9: **Select grade type and number of units**. Note: Because all MCDB 196/198/199 courses are fixed at "4-units" and "Letter Grade", you may not have to select anything on this page. **Click Continue**.

Step 10: Enter description of project and tangible evidence. **For project description and nature of faculty supervision, please write, "See attached proposal." The tangible evidence as proof of work completed will always be "Quarterly Research Paper"**. Click **Continue**.

Step 11: Review contract. Carefully **review the contract you have just made to make sure that you have the correct course number and instructor information**, and that you have appropriately completed any other parts of the contract, as detailed above.

Step 12: Terms/Requirements: You may receive a screen that asks you to acknowledge, **"I meet all eligibility requirements for this contract"**. Select this option, and click **Continue**.

Step 13: **PRINT THIS CONTRACT, GET YOUR FACULTY MENTOR'S SIGNATURE, AND TURN IT IN TO MY OFFICE BY FRIDAY, OF SIXTH WEEK. YOU DO NOT NEED TO GET THE CHAIR'S SIGNATURE ON THE CONTRACT. I WILL OBTAIN THAT SIGNATURE.**

**Research Apprenticeship (MCDB 196A/B)  
Acknowledgement Form**

In order to enroll in MCDB 196A, you must sign the following acknowledgement form and submit it to the Undergraduate Office, along with your 196A contract, appropriately completed project proposal, and faculty mentoring agreement.

In which course(s) are you proposing to enroll (along with 180A)?

\_\_\_\_\_ MCDB 196A      OR      \_\_\_\_\_ MCDB 198A\*

\*Only 4<sup>th</sup> year students are eligible to enroll in 198's along with the 180A/B seminars. Contact the MCDB Undergraduate Advisor for more information.

For the 180A research seminar course, please consult the [UCLA Schedule of Classes](#) and note the day and time it will be offered. **Please arrange your schedule so that you are available for the 180A section.**

I have read all information including enrollment instructions, application and proposal guidelines pertaining to the Research Apprenticeship courses I have indicated above, and I know that I am responsible for and will be held to all instructions and policies detailed therein.

\_\_\_\_\_  
Student Signature

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Student ID #

\_\_\_\_\_  
Overall GPA \*

\_\_\_\_\_  
Major GPA\*

\_\_\_\_\_  
Quarter/year joined lab (e.g., Spring 2014)

\_\_\_\_\_  
Print Full Name of Research Sponsor

\_\_\_\_\_  
Date

\* These GPAs are found on the DAR in designated sections.