COMPUTATIONAL AND SYSTEMS BIOLOGY INTERDEPARTMENTAL PROGRAM

COMPUTATIONAL AND SYSTEMS BIOLOGY (https://casb.ucla.edu)

Undergraduate Counselor: Maria Sanchez 102 Hershey Hall, (310) 825-5152, casb@lifesci.ucla.edu Working Hours: Monday – Friday 8:00AM – 5:00PM PST

COMMUNICATION

EMAIL

casb@lifesci.ucla.edu

Always include your full name and 9-digit student ID number (UID)

Response time is 1-2 business days. Response times may be slower in the weeks leading up to and during enrollment.

APPOINTMENTS

Booking link: https://my.ucla.edu/directLink.aspx?featureID=3&org=46&type=1

Virtual appointments are available over Zoom. You can book an appointment up to 2 weeks in advance. You will be sent an email with the Zoom meeting link after booking.

Appointments must be booked and cancelled at least 2 hours in advance. If a student does not show up to a virtual appointment within 5 minutes of their appointment start time, the meeting will be cancelled.

COMPUTATIONAL AND SYSTEMS BIOLOGY UNDERGRADUATE LISTSERV

Majors in the Computational and Systems Biology IDP will be subscribed to the <u>CaSB Undergraduate Office CCLE page</u>. This will connect you with all official communications from the department, including announcements about:

- Counseling hours/availability
- Department events
- > Enrollment procedures
- Curricular changes
- New classes or seats being opened during enrollment
- Programs related to graduate schools & professional schools
- Opportunities for research, leadership, internships, employment, scholarships, volunteering, and study abroad

Students who attend CaSB orientation will be automatically added to the CCLE page prior to the start of Fall quarter. Students can also subscribe themselves here: https://ccle.ucla.edu/course/view/casb-undergrad. Students can unsubscribe at any time.

COVID-19 AT UCLA

For the latest UCLA updates on return to campus, please visit: https://covid-19.ucla.edu/ucla-return-to-campus/.

CAMPUS SERVICES

COLLEGE COUNSELORS (see *College Counseling Units*) answer questions about your *overall degree requirements*:

- Entry Level Writing Requirement
- American History & Institutions
- Writing I and Writing II
- Quantitative Reasoning
- Foreign Language Requirement
- Expected Cumulative Progress (ECP)
- General Education requirements (including IGETC, UC Reciprocity)
- 60-unit Upper Division Requirement

COMPUTATIONAL AND SYSTEMS BIOLOGY INTERDEPARTMENTAL PROGRAM

- Senior Residency
- Unit Maximum
- Overall/Cumulative GPA
- Academic Standing: Academic Probation & Subject to Dismissal (STD)

College Counseling Units

- College Academic Counseling (CAC): A-316 Murphy Hall, (310) 825-3382; https://cac.ucla.edu/
- Academic Advancement Program (AAP): 1205 Campbell Hall; https://www.aap.ucla.edu/
- College Honors: A-311 Murphy Hall, (310) 825-1553; http://www.honors.ucla.edu/#
- Athletics: George Kneller Academic Center in the JD Morgan Center, (310) 825-8699; https://uclabruins.com/staff-directory/academic-student-services-phone-310-825-8699-fax-310-825-6732-department/3

DEPARTMENTAL COUNSELORS answer questions about your *major and minor requirements*:

- Lower Division major requirements
- Upper Division major requirements
- Minor requirements (as applicable)
- Course substitutions for the Major or Minor
- Global GPA encompasses Upper Division major requirements only
- Academic questions about applying to graduate or professional school

CAREER COUNSELORS at the UCLA Career Center answer questions about planning and exploring your future careers:

- Exploring different career paths that connect with academic and personal interests
- Resources for finding career options, internships, etc.
- Logistical issues about the application process for graduate or professional school
- Non-academic questions and issues about graduate or professional school
 - o Personal Statement
 - Letters of Recommendation Services
 - o Mock Interview

Strathmore Building, North Entrance, 2nd & 3rd Floors, (310) 206-1915, <u>www.career.ucla.edu</u>

OTHER CAMPUS RESOURCES (partial list)

BRUIN RESOURCES CENTER (BRC): Student Activities Center, Suite B44, (310) 825-3945, brc@saonet.ucla.edu, www.brc.ucla.edu

CAREER CENTER: Strathmore Building, North Entrance, 2nd & 3rd Floors, (310) 206-1915, www.career.ucla.edu

CENTER FOR ACCESSIBLE EDUCATION (CAE): A-255 Murphy Hall, (310) 825-1501, www.cae.ucla.edu

COUNSELING AND PSYCHOLOGICAL SERVICES (CAPS): John Wooden Center West, (310) 825-0768, www.counseling.ucla.edu

DASHEW CENTER FOR INTERNATIONAL STUDENTS & SCHOLARS: 106 Bradley Hall, (310) 825-1681, www.internationalcenter.ucla.edu

FINANCIAL AID: A-129J Murphy Hall, (310) 206-0400, www.financialaid.ucla.edu

International Education Office (Study Abroad): 1332 Murphy Hall, (310) 825-4995, info@ieo.ucla.edu, www.ieo.ucla.edu

LESBIAN GAY BISEXUAL TRANSGENDER CAMPUS RESOURCE CENTER: Student Activities Center, Suite B36, (310) 206-3628, lgbt@lgbt.ucla.edu, www.lgbt.ucla.edu

OFFICE OF THE DEAN OF STUDENTS: 1104 Murphy Hall, (310) 825-3894, dean@saonet.ucla.edu, www.deanofstudents.ucla.edu

OFFICE OF OMBUDS SERVICES: Strathmore Building, Suite 105, (310) 825-7627, ombuds@conet.ucla.edu, www.ombuds.ucla.edu

OFFICE OF STUDENT CONDUCT: 1104 Murphy Hall, (310) 825-3871, dean@saonet.ucla.edu, www.deanofstudents.ucla.edu

REGISTRAR'S OFFICE: 1105 Murphy Hall, (310) 825-1091, www.registrar.ucla.edu

SCHOLARSHIP RESOURCE CENTER: 233 Covel Commons, (310) 206-2875, src@college.ucla.edu, www.scholarshipcenter.ucla.edu

STUDENT LEGAL SERVICES: A-239 Murphy Hall, (310) 825-9894, slegal@saonet.ucla.edu, www.studentlegal.ucla.edu
TRANSFER STUDENT CENTER: 128 Kerckhoff Hall, (310) 206-3552, transfers@saonet.ucla.edu, www.transfers.ucla.edu

UNDERGRADUATE RESEARCH CENTER: 2121 Life Sciences, (310) 794-4227, urcsciences@college.ucla.edu,

http://sciences.ugresearch.ucla.edu/

VETERANS RESOURCE CENTER: 132A Kerckhoff Hall, (310) 206-3819, veteran@saonet.ucla.edu, www.veterans.ucla.edu

UCLA VOLUNTEER CENTER: www.volunteer.ucla.edu
UCLA DIRECTORY: www.directory.ucla.edu

UCLA LIBRARIES: www.library.ucla.edu (Online reference available 24/7)

COMPUTATIONAL AND SYSTEMS BIOLOGY INTERDEPARTMENTAL PROGRAM

UCLA STUDENT GROUPS

There are numerous student groups on campus in which you can get involved based on your interests. A comprehensive list of student groups may be found here: http://www.studentgroups.ucla.edu/home/

PRE-HEALTH

WEBSITE & FACEBOOK GROUP

http://prehealth.ucla.edu/ https://www.facebook.com/PreHealthUCLA/

REQUIREMENTS

https://cac.ucla.edu/wp-content/uploads/2021/03/Pre-Health-Requirements.pdf

CaSB CURRICULUM - EFFECTIVE FALL 2021

LOWER DIVISION REQUIREMENTS

Life Sciences 7A, 7B, 7C

Chemistry 14A, 14B, 14BL OR 20A, 20B, 20L

Physics 5A, 5B, 5C OR 1A, 1B, 1C

Calculus & Statistics Series - Option #1: Mathematics 31A, 31B, 33A, 33B, Statistics 10

Calculus & Statistics Series - Option #2: Life Sciences 30A, 30B, C&S BIO M32, Mathematics 33A, 33B, Life Sciences 40

Computer Science (COM SCI) 31 OR Program in Computing (COMPTNG) 10A

NOTE:

Students in certain tracks must complete additional lower division courses. These courses do not need to be completed prior to admission into the major.

Bioinformatics track:

• Computer Science 32 **OR** Program in Computing 10B and 10C

Biological Data Sciences track:

- Computer Science 32
- MATH 61 and/or MATH 115A are also recommended pre-regs for this track depending on chosen track courses.

Dynamical Modeling track:

MATH 32A is a recommended pre-req depending on chosen track courses.

All tracks:

LIFESCI 23L and/or CHEM 14C/30A are recommended pre-regs depending on chosen Life Science courses.

NOTE: Additional pre-reqs (beyond the required and recommended courses above) may be required for certain track courses. Students should check pre-reqs on the Schedule of Classes.

METHODOLOGY CORE UPPER DIVISION REQUIREMENTS: (7 COURSES TOTAL)

GATEWAY I - Intro & Survey - C&S BIO/COM SCI/BIOENGR M184

GATEWAY II - Research Topics - C&S BIO 185

PROBABILITY - STATS 100A OR MATH 170E OR EC ENGR 131A

STATISTICS - STATS 100B OR BIOSTATS 100A

COMPUTATIONAL AND SYSTEMS BIOLOGY INTERDEPARTMENTAL PROGRAM

BIOLOGICAL MODELING: C&S BIO M150

CAPSTONE SERIES (2 COURSES, PICK ONE SERIES) - Option #1: C&S BIO 199 and M187; Option #2: C&S BIO 198A and 198B;

Option #3: C&S BIO 199 and M187

CONCENTRATIONS: (5 UPPER DIVISION COURSES EACH; ONE CONCENTRATION MUST BE DECLARED)

Bioinformatics	COM SCI CM121
	■ COM SCI CM124
	■ MCD BIO 165A <i>OR</i> MCD BIO 144
	PHYSCI 125 OR MCD BIO 187AL
	 One additional course from list of electives on CaSB website
Biological Data Sciences	■ COM SCI CM121
	COM SCI 180
	 COM SCI M146 OR STATS 161 OR STATS 101C
	 Two additional courses from list of electives on CaSB website
Biomedical Systems	■ BIOENGR 100
	■ BIOENGR C102 OR 110
	■ EC ENGR 133A <i>OR</i> MATH 151A
	■ C&S BIO M186
	 One additional course from list of electives on CaSB website
Neurosystems	 NEUROSC M101A
	 NEUROSC M101B
	 NEUROSC 102 OR EC ENGR 113 OR MATH 155
	 C&S BIO M186 OR COM SCI M182
	 One additional course from list of electives on CaSB website
Systems Biology	■ EE BIOL 170 OR PHYSCI 166
	 MCD BIO 100 OR MCD BIO 144 OR MCD BIO 165A
	 PHYSCI 125 OR MCD BIO 187AL
	■ C&S BIO M186
	 One additional course from list of electives on CaSB website

NOTE: CaSB is in the process of revising the five concentrations above into three tracks. The revision is expected to go live in Winter 2022, pending final approval from the University. Students are held to any changes in the major until declared for the major (not the pre-major). Students can find more information on the proposed track curriculum here: https://ccle.ucla.edu/mod/forum/discuss.php?d=1102054.

CUSTOMIZED CONCENTRATIONS

Students may also propose a customized concentration/track. More information can be found here: https://casb.ucla.edu/casb-major/customized-concentrations/.

DEPARTMENTAL HONORS

Students with a grade-point average of 3.5 or better in required major courses and a 3.0 cumulative GPA may apply for departmental honors or highest honors during their final undergraduate quarter. Honors or highest honors will be granted at the discretion of the faculty sponsor and the faculty committee to students demonstrating exceptional ability on the senior research thesis.

DEPARTMENTAL SCHOLAR PROGRAM

Exceptional CaSB students may be eligible to apply to the Departmental Scholar Program, a 5-year B.S./M.S. program in which students complete their B.S. in Computational & Systems Biology and their M.S. in Bioinformatics at UCLA in approximately five years. More information and eligibility requirements can be found here: https://casb.ucla.edu/5-year-bs-ms-departmental-scholar-program/.

CHANGES TO THE MAJOR

Students are subject to any requirement changes in the major until they are officially admitted to the major (not the pre-major).

GRADING

All courses should be taken for a letter grade, C or better, with the exception of C&S BIO M184, which is only offered Pass/No Pass. Exceptions to this policy were allowed Spring 2020-Summer 2021 due to the Covid-19 pandemic.

SUBSTITUTIONS/PETITIONS

CaSB students have the option to petition to substitute a listed course for the pre-major and/or major with another course from UCLA and/or another college/university. Students also may petition to remain eligible for the major if they do not meet certain eligibility requirements. All petitions are reviewed by the Chair and/or Vice Chair.

Petitions collected and reviewed twice per quarter and once during Summer Session. Petitions will be due on:

- Friday Week 2 of Fall, Winter, and Spring quarters, as well as Friday Week 2 of Summer Session A
- Friday Week 8 of Fall, Winter, and Spring quarters

Please allow 7-10 business days after each deadline for faculty review. Students who do not turn in petitions by these deadlines will have to wait for the next review period. Students can begin submitting petitions as early as 2 weeks before each deadline.

Reminders for submitting petitions:

- Be mindful of enrollment passes and plan ahead.
- Course substitution petitions should be submitted at least the quarter prior to taking the substitute class (e.g., in Fall quarter for a class a student plans to take in Winter).
- Be mindful of study list and drop deadlines. For example, petitions submitted Week 2 will not be decided on prior to the Week 2 study list deadline.

The petition documents and full policy can be found here: https://casb.ucla.edu/petition/.

ACADEMIC ELIGIBILITY

Official admission to the CaSB major is contingent on successful completion of all pre-major courses while meeting the following requirements:

- a minimum 2.7 GPA in all pre-major courses
- a minimum 2.0 cumulative GPA
- a minimum grade of C or better in all pre-major courses

Students are permitted to repeat up to **two** pre-major courses if they do not receive grades of C or better. Students who receive grades below a C in three pre-major courses—either in separate courses or repetitions of the same course—are officially dismissed from the pre-major (students will be coded as Undeclared). In such cases, students will have the opportunity to appeal.

IMPORTANT NOTE REGARDING REPEATING COURSES

The Chemistry and Math series for the pre-major are **TRUE** sequences, i.e., you must complete the courses in order. Pre-requisites are strictly enforced and must be completed before moving forward in the series.

ADMISSION TO THE MAJOR

MAJOR APPLICATION

Once students have completed all of the pre-major coursework, **they must submit an application** to be entered into the major. The application can be found at https://casb.ucla.edu/admission/. **Students declare their concentration/track at the time that they declare the major.**

Students must submit the completed application to the casb@lifesci.ucla.edu. If a student does not meet all of the requirements to officially be entered into the major, they will need to petition by attaching a written statement addressing the circumstances that led to not being able to meet the minimum requirements. Students will be notified via email of the decision.

Students are subject to any requirement changes in the major until they are officially admitted to the major (not the pre-major).

CAPSTONE EXPERIENCE, RESEARCH, & CONTRACT COURSES

CaSB CAPSTONE

The Capstone experience is a senior-level sequence of two courses integrating the discipline via mathematical modeling, simulation, and active research and report writing. The experience culminates with the completion of a senior thesis.

There are three options for completing the Capstone courses:

For students completing research in a UCLA faculty member's lab:

Option 1: C&S BIO 199 (4 Units) AND C&S BIO M187 (4 Units)

Option 2: C&S BIO 198A (4 Units) AND C&S BIO 198B (4 Units)

For students completing research outside of UCLA or completing a substantive computational biology project via an internship:

Option 3: C&S BIO 195 (4 Units) AND C&S BIO M187 (4 Units)

Students are required to complete at least two quarters of research/internship project experience supervised by a UCLA ladder faculty member while they are enrolled in the Capstone courses, but students are strongly encouraged to complete additional research and/or start their projects early. CaSB recommends that students complete approximately a year of research/project experience to provide sufficient material for their senior theses.

RESEARCH CAPSTONES (OPTIONS 1 &2)

For your research, you will want to find a ladder faculty member (rank of assistant professor, associate professor, professor---not an adjunct or lecturer) who will agree to supervise your thesis. A faculty member who has "In Residence" listed after their professorial rank is fine (e.g., Associate Professor In Residence). You can check faculty member titles via the UCLA Directory. If you are unsure if the Primary Investigator (PI) you hope to work with is a ladder faculty member, please send questions to cash@lifesci.ucla.edu.

The goal is to find some part of a project for which you can be the lead person that creates a coherent and contained research story, even if it is contributing to some much larger goal or project by the faculty member/PI (usually it is). The individual part (i.e. your contribution) should involve some aspect of math modeling, computational simulation, or data analysis, so that there is a quantitative/mathematical/computational piece. Your research should also be connected to a biological question. In the end, students should look for a project for which they can explain and justify a goal, and then communicate what they did to achieve said goal. For the purposes of the Capstone classes, the research needs to be enough for a coherent story: a 10-minute presentation, a poster, and an approximately 10 pages or longer paper.

Students are responsible for finding their own research project for the purpose of the Capstone. Most students find research by directly emailing faculty members and asking about opportunities. The <u>Undergraduate Research Center</u> has a checklist on how to identify and contact faculty members, which students can find <u>here</u>. Many students use the <u>CaSB Affiliated Faculty List</u> to identify professors with similar research interests. Students can also look at the faculty lists of other departments that align with their interests and see if any of those professors are doing computational biology research.

There are also portals and pages where research opportunities are posted, including the <u>Undergraduate Research Center Portal</u>, the <u>Computational Biosciences Undergraduate Research Portal</u>, and the Bioinformatics Graduate Program's <u>Undergraduate Research page</u>.

If students identify a research project and have any concerns about whether the research would be appropriate for the senior thesis, students are encouraged to write a brief project description (about half a page to a page) outlining the research question(s) and planned research activities and submit it to cash@lifesci.ucla.edu to have it reviewed by the CaSB faculty.

Students pursuing additional quarters of research may choose to enroll in additional quarters of C&S BIO 199 to earn upper division units for their research, but this is not required.

For more information on what to look for in a project for the Capstone and how to find opportunities, contact the CaSB counselor and review the CaSB website: https://casb.ucla.edu/major/capstone-courses/.

INTERNSHIP/EXTERNAL RESEARCH CAPSTONES (OPTION 3)

Students will engage in an internship supervised by a UCLA faculty member (in addition to their on-site supervisor) while taking 4 units of C&S BIO 195, an individual studies internship course. Students must complete a minimum of 80 hours of work, though many may complete more. Students will be expected to coordinate with their on-site supervisor to ensure that the internship is suitable for use towards the Capstone project (see expectations below). In order to enroll in C&S BIO 195, students must provide proof of internship offer, on-site supervisor contact sheet, a description of the work to be completed, and the number of hours to be worked. At the completion of C&S BIO 195, the on-site supervisor will be asked to provide feedback on the student's performance and confirm the work completed. Students will also submit a 2-3 page write up of the work completed. The supervising faculty will assign a Pass/No Pass grade based on the on-site supervisor's evaluation and the student's write up, as outlined in the 195 contract. Students will then complete C&S BIO M187, a research communications class that teaches students to communicate project results, both orally and in writing, through in-class presentations and completion of the senior thesis/project report. In this class, students will complete the three deliverables for the Capstone project (paper, presentation, poster). The final grade for M187 will be assigned by the professor of the class, based on the deliverables completed.

Students must coordinate with their on-site internship supervisor to confirm the details of the project. Students will be required to communicate the results of their project orally and in writing as part of the C&S BIO 195 and M187 courses. Different organizations have different data privacy regulations. Students must ensure that their internship site and onsite supervisor will allow them to communicate the results of their work in a course setting. Students will also need to find a ladder faculty member who is willing to serve as the instructor of record for their 195 course.

Not all internships may be suitable for use towards the Capstone. In order to use an internship towards completion of your Capstone requirements, you should be completing a substantive computational biology project (remember that it should be similar to doing at least two quarters worth of research). Your project should involve some aspect of math modeling, computational simulation, data analysis, or other quantitative work so that there is a quantitative/mathematical/computational piece. Your project should also be connected to a biological question. While the project does not necessarily have to contribute to scholarly research, there should be some communicable results of the project. In the end, students should look for a project for which they can explain and justify a goal, and then communicate what they did to achieve said goal. For the Capstone requirements, the project needs to be enough for a coherent story: a 10-minute presentation, a poster, and an approximately 10 pages or longer paper.

To earn credit of C&S BIO 195, students must complete no less than 80 hours of work at their internship site and submit all required documentation.

For more information on the internship Capstone option, contact the CaSB counselor and review the information here: https://ccle.ucla.edu/mod/forum/discuss.php?d=1083347.

ENROLLING IN CAPSTONE CONTRACT COURSES

There are both lower division (e.g., Student Research Program [SRP] 99) and upper division (e.g., C&S BIO 195, 199, 198A, 198B) research/independent study courses. If you do not have prior laboratory research experience, your faculty mentor may require that

you enroll in at least one quarter of SRP 99; the number of quarters of SRP 99 you enroll in is at the discretion of your faculty mentor. For upper division research/independent study courses, your faculty mentor will determine which is the appropriate course for you to enroll in.

The Student Research Program (SRP) 99 is administered by the Undergraduate Research Center (URC). Contracts for SRP 99 must be submitted to the URC office each quarter by Friday of Week Two.

For upper division courses (e.g., 195, 198, and 199s), each department has different policies and different submission deadlines for your contracts. You are responsible for being aware of these deadlines. Contracts are created via MyUCLA ("Contract Courses" link). For enrollment in C&S BIO 195, 199, 198A, or 198B, detailed instructions on how to enroll are sent out via CCLE prior to each quarter.

CLASS PLANNING

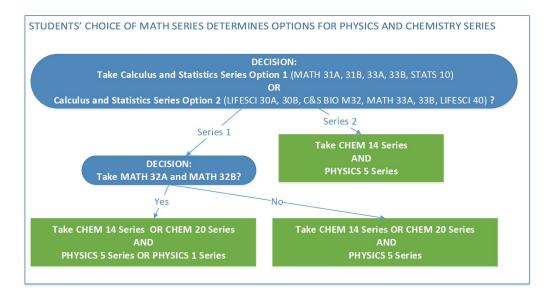
In order to acclimate yourself to UCLA, it is recommended that you take **no more than three (3) classes, plus a 2-unit seminar, in your first quarter at UCLA**. As a CaSB major, we recommend that you take **two (2) major/pre-major classes and one (1) non-science course**, e.g., general education, writing, etc. in your first quarter. For questions about specific courses pertaining to your major, please see your departmental counselor.

Be mindful of pre-requisites when planning your coursework. Some upper division courses required for the major and concentrations have additional pre-requisites that are not required for the CaSB major or pre-major. It is recommended that you plan out your coursework well in advance to ensure completion of all requisites. Your departmental counselor can help with course planning. Requisite flowcharts are also available on the CaSB website. On the Schedule of Classes, you can check to see whether requisites are being enforced (you will be prevented from enrolling without completion of the requisites) or are warnings.

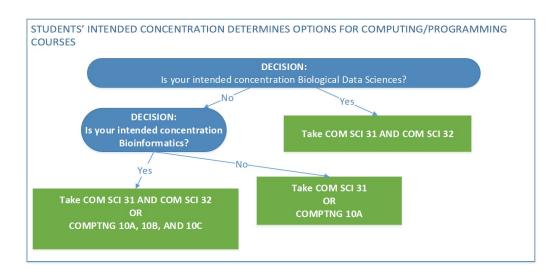
CHOOSING BETWEEN PRE-MAJOR SERIES

Life Science-Oriented Routes: Calc & Statistics Option 2, CHEM 14 series, PHYSICS 5 series Physical Science- Oriented Routes: Calc & Statistics Option 1, CHEM 20 series, PHYSICS 1 series

Students' choice of Calc & Statistics series impacts their options for the PHYSICS and CHEM series.



Depending on student's intended concentration, students may want to choose between COM SCI 31 over COMPTNG/PIC 10A.



REGARDING GENERAL EDUCATION REQUIREMENTS

As a major in the Life Sciences, you should NOT take any GE courses in the <u>Foundations of Scientific Inquiry</u> category. The courses within the CaSB pre-major will satisfy this area. However, you should check with your College Counseling Unit to verify any outstanding GE course requirements.

OTHER COURSE PLANNING TIPS

- If possible, avoid taking two (2) lab courses in the same quarter.
- If possible, save some of your GE classes for later quarters in order to balance your schedule.
- Check the Final Exam schedule when choosing classes. Most students prefer not having more than one final on the same day. Your instructor will not change the date of the final exam for your convenience.
- If possible, make sure that at least two (2) of your GE courses are Upper Division (UD) courses, e.g., Visual & Performing Arts GE = Film-TV 106A. UD = course numbers 100-199
- If you have questions about your schedule, please consult with your departmental counselor. Meet with your departmental counselor regularly to ensure that you are on track, minimum once per year.

ENROLLING IN CLASSES

ENROLLMENT HELP

Your **DEPARTMENTAL COUNSELOR** can assist you with Enrollment in classes offered by their department (e.g. CaSB). **Departmental Counselors** <u>CANNOT</u> <u>enroll</u> <u>you into classes offered by another department</u> (e.g., EEB counselors can only enroll you into EEB classes, the Phy Sci counselor can only enroll you into Phy Sci classes, etc.).

If you need assistance with enrollment into a class that is not a C&S BIO course, contact the relevant departmental counselor (see contact information at end of this packet).

If you are inquiring about enrollment into a class, always include the following in your correspondence:

- ☐ Your full name
- ☐ Your 9-digit student ID number (UID)
- ☐ The Department and Course Number of the class you are interested in (e.g., Chem 14C, EE BIOL 100, etc.)
- At least three (3) discussion/lab sections that will work in your schedule, listed in order of preference from most preferred to least preferred (e.g., Dis 1B, 1F, 3A).

RESTRICTIONS

During enrollment passes, some departments place an enrollment restriction on their upper division courses (courses numbered 100-199) to ensure that officially declared majors/minors in their department are able to enroll in the department's classes. Frequently, the enrollment restriction is lifted once the SECOND ENROLLMENT PASS begins. However, a department may designate a specific date when enrollment is open to non-departmental majors/minors. You should always check the "Class Notes" that are on the class listing on the online Schedule of Classes for info on enrollment restrictions (https://sa.ucla.edu/ro/public/soc.

IMPORTANT DEADLINES (NOTE THESE ARE TYPICAL DEADLINES, BUT SUBJECT TO CHANGE EACH QUARTER. YOU SHOULD ALWAYS CHECK THE REGISTRAR'S ONLINE CALENDAR FOR SPECIFIC DEADLINE DATES EACH QUARTER:

https://www.registrar.ucla.edu/Term-Calendar

End of Week 2:

- Last Day to drop IMPACTED courses.
- Last Day to change Study List without fee via MyUCLA.
- Last Day to enroll in courses for credit without late Study List fee via MyUCLA.
- Last Day to check wait lists for courses via MyUCLA.
- Last Day to file undergraduate request for educational fee reduction with the College.
- Last Day to declare bachelor's degree candidacy for current term.

End of Week 3:

- Last Day to add courses with per-course fee via MyUCLA.
- Last Day to file Late Study List with fee.
- > Last Day to be audited for undergraduates approved for reduced educational fee.

End of Week 4:

- > Last Day to drop Non-Impacted courses without a transcript notation with per-course fee via MyUCLA.
- Undergraduate course materials fees are assessed based on enrollment at end of Week 4.

End of Week 6:

Last Day for undergraduates to change grading basis (letter grade to/from P/NP) with per-transaction fee via MyUCLA.

End of Week 7

Last Day to drop Non-Impacted courses with transcript notation and per-course fee via MyUCLA.

End of Week 10

Last Day to drop Non-Impacted courses by petition with instructor approval, with transcript notation and per-course fee. This cannot be done via MyUCLA.

COMPUTATIONAL AND SYSTEMS BIOLOGY INTERDEPARTMENTAL PROGRAM

DEPARTMENTS

MINORS:

Ecology and Evolutionary Biology

101 Hershey Hall, (310) 825-1680, (www.eeb.ucla.edu),

Student Affairs Officers: Jessica Angus and Wendy Ramos (contact via Message Center)

MAJORS: BIOLOGY, B.S.

ECOLOGY, BEHAVIOR, AND EVOLUTION (EBE), B.S.

MARINE BIOLOGY, B.S.
CONSERVATION BIOLOGY

EVOLUTIONARY MEDICINE

Integrative Biology and Physiology

125A Hershey Hall, (310) 825-3892, (www.physci.ucla.edu Student Affairs Officer: Inna Gergel (gergel@physci.ucla.edu)

MAJOR: PHYSIOLOGICAL SCIENCE, B.S.

Microbiology, Immunology, and Molecular Genetics

1602B Molecular Science, (310) 825-8482, (www.mimg.ucla.edu) Student Affairs Officer: Joy Ahn (undergrad@microbio.ucla.edu)

MAJORS: MICROBIOLOGY, IMMUNOLOGY, AND MOLECULAR GENETICS, B.S.

Molecular, Cell, and Developmental Biology

128 Hershey Hall, (310) 825-7109, (www.mcdb.ucla.edu)

Student Affairs Officers: Connie Firestone & Maggie Schmall (undergradmcdb@lifesci.ucla.edu)

MAJORS: MOLECULAR, CELL AND DEVELOPMENTAL BIOLOGY, B.S.

Psychology

MINORS:

2812 Life Sciences Building, (310) 825-2730, (www.psych.ucla.edu)

Student Affairs Officers: Melina Solomon-Dorian, Michelle Herrera, Nandini Inmula, Randy Lesko, & Dylan Sarnowski (undergraduate@psych.ucla.edu)

MAJORS: PRE-PSYCHOBIOLOGY (Life Sciences major)

PSYCHOBIOLOGY, B.S. (Life Sciences major)

PRE-PSYCHOLOGY (transfer admits in this major cannot change to a Life Sciences major)
PSYCHOLOGY, B.A. (transfer admits in this major cannot change to a Life Sciences major)
COGNITIVE SCIENCE, B.S. (transfer admits in this major cannot change to a Life Sciences major)

COGNITIVE SCIENCE; APPLIED DEVELOPMENTAL PSYCHOLOGY

INTERDEPARTMENTAL PROGRAMS

Biomedical Research - Biomedical Research Minor

220B Hershey Hall, (310) 825-0237, (www.biomedresearchminor.ucla.edu) Student Affairs Officer: Jayro Ramos (bmdresminor@lifesci.ucla.edu)

MINOR: BIOMEDICAL RESEARCH

Computational & Systems Biology

102 Hershey Hall, (310) 825-5152, (https://casb.ucla.edu/) Student Affairs Officer: Annelise Werhel (casb@lifesci.ucla.edu) MAJORS: PRE-COMPUTATIONAL & SYSTEMS BIOLOGY

COMPUTATIONAL & SYSTEMS BIOLOGY, B.S.

MINORS: MATHEMATICAL BIOLOGY, SYSTEMS BIOLOGY, STRUCTURAL BIOLOGY

Neuroscience

1339 Gonda Center, (310) 206-4407, (www.neurosci.ucla.edu)

COMPUTATIONAL AND SYSTEMS BIOLOGY INTERDEPARTMENTAL PROGRAM

Student Affairs Officer: Jaclyn Robbin & Aftin Whitten (neurosci@ucla.edu)

MAJOR: NEUROSCIENCE, B.S. MINOR: NEUROSCIENCE

Society and Genetics

3360-C Life Sciences Building, (www.socgen.ucla.edu)

Student Affairs Officer: Maverick Santos (santosmaverick@socgen.ucla.edu)

MAJORS: PRE-HUMAN BIOLOGY AND SOCIETY (B.A./B.S.)

HUMAN BIOLOGY AND SOCIETY, B.A. HUMAN BIOLOGY AND SOCIETY, B.S.

MINOR: SOCIETY AND GENETICS

Life Sciences Core Education Program

2305 Life Sciences Building, (310) 825-6614, (https://www.lscore.ucla.edu/)

The Life Sciences Core Education Program brings together faculty, staff, and students from all six of our Life Science departments to create a common and integrated curriculum for the first years of all undergraduate programs within UCLA's Division of Life Sciences. NO MAJORS OR MINORS OFFERED.

DEPARTMENTAL CONTACTS IN PHYSICAL SCIENCES AND ENGINEERING

Chemistry & Biochemistry (All Chemistry classes, e.g., Chem 14-series, etc.)

4006 Young Hall, (310) 825-1859, (www.chem.ucla.edu) Student Affairs Officers: Nick Baerg (ugrad@chem.ucla.edu)

Mathematics (All Math classes, e.g., Math 31-series, etc.)

6356 Math Sciences Building, (310) 206-1286, (www.math.ucla.edu)

Student Affairs Officers: Connie Jung, Vaneh Hartoonian, & Yoni Anderson (ugrad@math.ucla.edu)

Physics (All Physics classes, e.g, Physics 5-series)

1-707D Physics and Astronomy Building, (310) 206-1447, (www.physics.ucla.edu)

Student Affairs Officers: Jazmine Vega (jazminev@physics.ucla.edu)

Statistics (All Statistics classes, e.g., Stats 13)

8117 Math Sciences Building, (310) 206-3742, (http://statistics.ucla.edu/)

Student Affairs Officer: Mike Kang (contact via Message Center)

UCLA Samueli Office of Academic and Student Affairs (All Engineering classes, e.g., COM SCI, EC ENGR, BIOENGR)

6426 Boelter Hall, (310) 825-9580, (https://www.seasoasa.ucla.edu/)

Student Affairs Officers: Multiple (https://www.seasoasa.ucla.edu/counselors/)