Dear CBS Parents,

Congratulations! We are very pleased that your son or daughter has decided to pursue a degree at UC Davis. The College of Biological Sciences (CBS) welcomes you to Freshman Orientation 2014. We hope your stay will be valuable, and provide you with ample information to help you support your student through their undergraduate academic journey.

As academic advisers, we know that your son or daughter will rely on your support and guidance in the coming years. In the following pages we offer you some helpful tips to help you and your student. Students and parents receive a large amount of printed information, which can be overwhelming. We hope that you will keep this document close at hand in the coming years. We want you to depart from your son or daughter’s dorm room in September feeling confident that you are armed with the necessary information required to help a UC Davis student.

Tip #1: ENCOURAGE YOUR STUDENT TO SEE AN ACADEMIC ADVISER EARLY AND OFTEN

There are three levels of academic advising in CBS: staff, faculty, and peers. All of the staff academic advisers and peer advisers for the College of Biological Sciences are housed in the Biology Academic Success Center (BASC) located on the ground floor of the Sciences Laboratory Building (SLB) in room 1023. The staff adviser(s) for your student’s major will assist with general questions including “Which classes should I take to graduate? What should my four year plan look like? How do I maintain good academic standing? I am struggling with my classes, who can help me? What kind of job can I get with a biology degree? And how do I receive transfer credit for community college classes?” Your student can make an appointment on-line (biosci.ucdavis.edu/BASC) to speak with an adviser, or can come in on Friday mornings for drop-in advising. We are eager to help!

Every major also has an assigned master faculty adviser. These individuals are CBS faculty members who conduct research, teach classes, and advise students on matters related to research and internship experience, applications for graduate and professional school, and general assistance with defining career goals. Students are welcome to email their faculty master advisers directly and schedule a time to meet in person. BASC advisers can make your student aware of the master adviser for their major.

We find that our students benefit from speaking with advanced undergraduate students about their academic experiences. The BASC peer advisers are current CBS students who are highly trained to help answer general questions about courses, scheduling and campus life/concerns. Peer advisers are available on a daily basis during the academic year for drop-in appointments.

So - when should your daughter or son see a BASC staff adviser?

BASC should be your student’s first stop for answers to any question. Our primary goal is to help your student be successful academically, and we find that this requires students to be self-aware and proactive. We encourage all of our students to ask for help. After all, a problem or challenge will only remain small when it is addressed immediately! Staff advisers can assist with
information and decisions about university and college requirements, leaves of absence, dropping courses, repeating courses, multiple petitions for exceptions, and changes of major. We also help students who may be having problems (personal, medical, financial) that are affecting academic performance. Advisors can guide students to other sources of help.

To get to know our incoming students, all freshmen are required to attend a Mandatory Advising appointment before February 2, 2015. This brief appointment is meant to encourage students to familiarize themselves with campus resources early, and to begin planning their four years at UC Davis. By meeting with students early in their academic career, we hope to get students started on the path to academic success quickly. Beyond this required appointment, students must be proactive and seek out advising— we do not contact them unless they are in academic difficulty. No question is a dumb question at BASC and professional staff advisers are available to assist CBS students with ANY question imaginable. If we do not know the answer, we will refer them to the proper resource office or person.

Tip #2: RECOGNIZE THE CHALLENGE - NUDGE, DON'T PUSH

UCD is very challenging and students need to find their own pace. Rest assured that the advisers working with your student will help them identify the right combination of courses to keep moving along rapidly, but successfully.

The courses at Davis are intellectually challenging and require a significant amount of study outside of class. Academic success at UC Davis may require drastically different study habits than what your student is accustomed to from high school. UC Davis biology majors require an average of 25-30 hours of study time per week, outside of the hours spent attending class. A successful UC student will allot appropriate study time, and have a course schedule each quarter balanced with both major and non-major courses. Students need to average 15 units per quarter to reach the 180 units to graduate in 4 years and to meet required minimum progress standards.

The University of California wants your student to graduate in four years, and we will do our best to help your student meet this goal. Students must complete minimum of 180 units to earn a degree. To reach this point, students will take a combination of courses each quarter to satisfy requirements for their major, general education, college requirements and many electives. As students meet with advisers, we will help them determine their level of competency, assess their study habits, consider their family or work requirements, and help them create an individualized, manageable schedule that will ensure their success. Note: first quarter students are recommended to take a lighter academic load of about 12-14 units to acclimate to the quarter system and college level coursework.

In addition, to support the University's goal of graduating students in four years, the faculty has outlined minimum progress expectations. Your student will be informed of these rules during their advising sessions during orientation and mandatory advising. However, it is important for parents to understand that students are expected to complete a minimum of 39 units each academic year. Explicit information about minimum progress can be accessed at http://registrar.ucdavis.edu/minprog/. We hope you will familiarize yourself with this information. Your support and encouragement will ensure all students progress at the four-year graduation rate, but no less than the minimal rate.

It is appropriate and necessary for your students to take courses that are purely elective. Tractor Driving (actual name: Field Equipment Operation) is a real course at Davis and students earn 2 units toward graduation upon completion. It is one of those appropriate “fun” classes that help students maintain their balanced schedule so your son or daughter can be an academic success.
Tip #3: SUPPORT YOUR STUDENT AS THEY DISCOVER THEMSELVES

Please stay connected! We know that students who have family support and gentle encouragement are the most successful. Ask your students about their grades, ask them if they enjoy their major classes, and send them to see an adviser if they (or you) have concerns. Let the support services at UC Davis help guide and direct your son or daughter, and have confidence that we can help them make wise academic choices.

We welcome you as UC Davis parents; feel free to call us with questions or concerns. We cannot discuss confidential academic issues with a parent unless a student signs a release of confidentiality, but we will provide you with general information and advice for your student.

We hope your experience with your student’s education in the College of Biological Sciences is exhilarating, uncomplicated and fun. Thank you for joining us for Orientation! We look forward to seeing you in a few years (hopefully four) at our CBS Commencement ceremony when you can announce that you are “the proud parent of a UCD alum!”

Sincerely,

The BASC Academic Advisers

Mara Evans
Biological Sciences (BIS)

Joyce Fernandez
Neurobiology, Physiology & Behavior (NPB)

Patricia (Pat) Herthel
Biological Sciences (BIS)

Francis David
Neurobiology, Physiology & Behavior (NPB)

Tori Hollowell
Biological Sciences (BIS) and Plant Biology (PLB)

Tom Hall
Exercise Biology (EXB)

Erin McMurry
Biological Sciences (BIS)

Jennifer Flood
Exercise Biology (EXB)

Lori Bergum
Biochemistry & Molecular Biology (BMB)

Millie Ling-Tsai
Microbiology (MIC) and Genetics and Genomics (GEN)

Julie Evans
Biochemistry & Molecular Biology (BMB)

Mary Aften
Evolution, Ecology & Biodiversity (EEB) and Undeclared

Maria Saldana-Seibert
Cell Biology (CBI)

Mariella Guzman-Aguilar
International Student Academic Adviser
### PREPARATORY CORE CURRICULUM

This is the preparatory core curriculum that our freshmen and sophomores follow.

<table>
<thead>
<tr>
<th>COURSE TYPES</th>
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<th>OPTIONS</th>
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<tbody>
<tr>
<td>Mathematics (Calculus)</td>
<td>MAT 17A + 17B + 17C</td>
<td>The Math 17 series uses calculus in biology and medical applications and provides biology students with calculus as a tool for solving problems. This series completely satisfies professional school (including medical) requirements. The Math 21 series studies calculus in depth and is recommended for students who enjoy mathematics and wish to continue their math studies to higher level coursework or pursue majors in engineering, math or other physical sciences.</td>
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<tr>
<td>Started in freshman or sophomore year</td>
<td>Or</td>
<td></td>
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<tr>
<td></td>
<td>MAT 21A + 21B</td>
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<tr>
<td></td>
<td>(21C recommended for some CBS majors)</td>
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<tr>
<td>General Chemistry</td>
<td>CHE 2A + 2B + 2C</td>
<td>The CHE 2 series is the recommended general chemistry offered at UC Davis and completely satisfies professional school (including medical) requirements. The CHE 2H series is recommended for students who enjoy chemistry and might want to continue their chemistry studies to higher level coursework or pursue majors in chemistry or chemical engineering.</td>
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<tr>
<td>Started in freshman year</td>
<td>Or</td>
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<td></td>
<td>CHE 2AH + 2BH + 2CH</td>
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<tr>
<td>Biological Sciences (Introductory Biology)</td>
<td>BIS 2A + 2B + 2C</td>
<td>These three courses constitute an excellent introduction to the field of biology and its sub-disciplines. These courses must be taken in sequence (there are no CHE or MATH prerequisites). For freshmen, we recommend BIS 2A first or second quarter in addition to taking chemistry. This means delaying calculus until spring quarter or later.</td>
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<tr>
<td>Started in freshman year</td>
<td>NOTE: Minimum C-grade required before progression to next level allowed.</td>
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<tr>
<td>Organic Chemistry</td>
<td>CHE 8A + 8B (prereq. CHE 2B w/ C-minimum)</td>
<td>The CHE 8 series provides a solid background in organic chemistry for biology students. If you desire a more in-depth coverage of organic chemistry or plan to attend a professional school (such as medical) that requires a full year of organic chemistry, take the CHE 118ABC series. CHE 118ABC is required for the Biochemistry and Molecular Biology major.</td>
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<tr>
<td>Started sophomore year</td>
<td>Or</td>
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<tr>
<td></td>
<td>CHE 118A + 118B + 118C (prereq. CHE 2C w/C-minimum)</td>
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<tr>
<td>General Physics in sophomore or junior year. This should NOT to be taken in first year unless CHE and math were completed at community college prior to matriculating to UCD.</td>
<td>PHY 7A + 7B + 7C (prereq. MAT 16B/17B/21B)</td>
<td>This is the recommended general physics series for life science students. This series is designed for engineering and physical science students and not recommended for our students. Note that four quarters must be completed if taking this series, rather than the 3 quarters of the 7ABC series.</td>
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<td>OR</td>
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<td></td>
<td>PHY 9A + 9B + 9C + 9D (prereq. MAT 21B)</td>
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Cohort Program

A Freshman Experience Program for College of Biological Science (CBS) students

The Cohort Program is designed to provide students with a framework for building a community within the college of CBS. Having a community is important because the support system and a professional social network available will reduce the isolation that many students feel upon arrival and will improve the entire educational experience. We hope to make the first year more personal and community members more approachable. To accomplish this, the incoming freshmen class - 1300 students - will be divided into 6 smaller groups, each named after a major branch in the “tree of life”. Within these groups students will have opportunities to participate in components of the program such as: a seminar class (BIS 98), field trip opportunities, faculty lunch discussions, and CBS events. Attending these components will facilitate relationships with peers, faculty, and advisors.

One third of the CBS freshmen will take the BIS 98 class this fall and will be signing up for it at orientation (another third of the CBS freshmen will take it in winter and the final third will take it in spring). Placement depends upon the student’s orientation date. This is a pass/no pass class in which faculty will talk about their research and its applications, their career path, and new challenges in their field. It is designed to provide students with insight about the different specialties in the biological sciences and will make our faculty more approachable. In a university where a major focus is research we want to make this resource more accessible and give students a way to get involved.

In early October we will host a Fall Welcome Event where each student will receive a Cohort specific t-shirt and a light lunch. The event is on October 1st, which is the day before classes start during “Welcome Week.” In addition, as we get closer to the school year we will inform students of other cohort components and will give them information about how to participate.

Ashley Vater
Cohort Program Coordinator
College of Biological Sciences, Dean's Office
awvater@ucdavis.edu
Special Opportunities for CBS Students

Research and Special Study Courses (99, 199)

Each department website lists faculty doing research in their department. Students can explore their individual research interests and learn about the over 300 faculty who invite them to participate in their lab’s research. This departmental information, and additional information one can gather from the Undergraduate Research Center website (http://undergraduateresearchcenter.ucdavis.edu), will provide students with the contact information needed to make the initial inquiry into working with a particular professor.

Undergraduate Research Conference (April)

Undergraduates present faculty-sponsored research in all academic fields through oral presentations and poster sessions at this annual campus event co-sponsored by the Office of the Provost and the Office of the Vice Chancellor for Student Affairs. For more information visit their website: http://urc.ucdavis.edu/

Internships

Internships are an important aspect of undergraduate education for students at UC Davis. Internships are part-time or full-time, paid or volunteer experiences in which students integrate academic interests with skills gained in the workplace. An internship may help students quickly find out whether they do or do not have a passion for a particular career. In addition, the internship experience allows one to work directly with professionals. Students have the opportunity of contributing to professional activities and, without a doubt, they will learn about themselves and career options. Each quarter, hundreds of UC Davis students participate in health care and research internships. Students earn academic credit, obtain transcript notation, or both, for participating in these internships.

The Internship and Career Center (ICC), located on the second floor of South Hall, offers assistance in identifying, obtaining and successfully completing internships. Students considering careers in health care can choose from clinical and hospital internships in more than forty areas including hospitalized patient care, physical therapy and rehabilitation, cardiac services, family practice, OB/GYN, pediatrics, radiology, emergency room, surgery, dentistry, optometry, and pharmacy. Generally, these internships require a four-hour per week commitment for one quarter. Descriptions of the health care internships are available at the ICC or on line at http://icc.ucdavis.edu.

Students may also select from a variety of laboratory research, public health, and clinical research internships. Research opportunities are available both on-campus in the laboratories of UC Davis faculty and off-campus in industry. Most on-campus laboratory internships require at least a two-quarter commitment of ten to twelve hours per week. To obtain such an internship on- or off-campus, students begin by selecting projects of interest from the ICC internship listings available in binders at the ICC or on the web (http://icc.ucdavis.edu). For additional on-campus research opportunities, students should visit the CBS website (biosci.ucdavis.edu) or the Undergraduate Research Center (undergraduateresearch.ucdavis.edu/).
Spring Quarter or Summer Session at Bodega Marine Laboratory

The Bodega Marine Laboratory is a premiere marine biology facility where a student can study in spring quarter or in summer session. Anyone who has met the prerequisites for the Bodega courses is welcome. The spring quarter at Bodega includes 5 weeks of two lecture courses, and 5 weeks of lab and independent research.

A marine research colloquium is held once a week, often given by famous scientists who are using the Laboratory facilities. Check with your adviser about using these courses to satisfy major requirements. Bodega also offers courses in summer session 1 and summer session 2.

Students work closely with faculty and will get to know them on a first-name basis. You will need to pay room and board to reside in their dorms or find housing nearby. There may be some financial aid monies available to help with these extra expenses.

The facilities are located on the Bodega Marine Reserve, one of the most biologically productive coastal areas in North America. The scenery is magnificent, and the educational opportunity and research experience is beyond compare. If you are into marine biology, this is a must do! For more information visit their website: http://www.bml.ucdavis.edu/.

Education Abroad Center Program

Our EAP office offers outstanding biological sciences and non-biological science education abroad opportunities. The programs range from one academic quarter (or summer) to one academic year. Going to another country truly broadens your educational experience in ways not available through any other means. There are many biology programs available throughout the world. For example, you can study tropical biology in Costa Rica and marine biology in Australia.

Students often are concerned about satisfaction of major or degree requirements, time to degree and money needed to participate in an EAP experience. But, before you rule it out, talk with your major adviser and the EAP advisers to get more information. It may be easier than you think to go abroad. Many GE courses and some major courses equivalencies have already been established and approved. Please visit the EAP offices located at 207 3rd Street Suite, #120 or their website http://eac.ucdavis.edu/ for more information.

Davis in Washington D.C.

The Davis in D.C. internship program is available every spring and fall in Washington D.C. No matter what your politics are, there is an internship experience waiting for you. And yes, you earn degree credit.

As a biologist, you could intern at the National Institute of Health, the U.S. Environmental Protection Agency, the National Science Foundation, the National Zoological Park or Botanical Gardens, the American Public Health Association as well as Congress. There are over 350 internships available. For more information contact the UC Davis Washington Center in South Hall (752-6652).

College of Biological Sciences
Biology Academic Advising Center (BASC)
1023 Sciences Laboratory Building
(530) 752-0410
biosci.ucdavis.edu/basc