Welcome to the Department of Biological Sciences

2014 Orientation for Transfer Students
What is the purpose of orientation?

- Start you on the road to successfully completing your degree.
- Introduce you to our department and its programs.
- Provide you with sources of further information.
Some Keys to Success

- Be informed.
- Be active.
- Use your resources.
- Start now.

You will have a chance today to start using some of these keys.
Who are we?

- 1000 undergraduate majors
- 900 undergraduate pre-majors
- 50 graduate students
- 23 full-time faculty members
- 10 staff members
- 20-25 part-time faculty and graduate teaching assistants
Where are we?

• Department Office
  Sequoia Hall 202
  (916) 278-6535
  6000 J Street
  Sacramento, CA  95819

• Website:  http://www.csus.edu/bios/
Degrees offered in Biological Sciences

- BA in General Biology
- BS (11-12 additional elective units)
  - General Biology (no concentration)
  - Biomedical Sciences concentration
  - Cell and Molecular Biology concentration
  - Clinical Lab Science concentration
  - Ecology, Evolution, and Conservation concentration
  - Forensic Biology concentration
  - Microbiology concentration
Degree requirements

To obtain a degree in Biological Sciences you must meet

- CSUS University (General Education + Graduation) Requirements
  - See University Academic Advising Center, Lassen 1013

- Biological Sciences Department (Major) Requirements
  - See Natural Sciences Advising Center, SQU 238; mandatory for your first semester here

- See Biological Sciences Advisors
  Blue handout lists advisors by area of interest
Biology pre-major

To be accepted into the Biology major, you must:

1) Complete Bio 1, Bio 2, Chem 1A, English, and Stat 1 with a C or better. **Only the first or second attempt of these courses will be accepted**
2) Complete a minimum of 30 units at the college level
3) Have an overall GPA of 2.5 across these courses (the five courses listed above)

**Students who have not yet completed these requirements (all freshmen) will be considered “pre-biology”**
Impaction of the Biological Sciences major – coming Fall, 2015

- As of Fall, 2015, not all pre-majors who are interested in converting to the major will be allowed to do so. Given the timing of your entry to the University, this will likely affect you.
- How it works:
  - All students who have completed the pre-major courses and apply for the major are rank-ordered according to their GPA across the pre-major courses.
  - The Department will accept as many students as it can accommodate (starting with those who have the highest GPA), based on graduation and attrition.
How will Impaction affect me?

• The best way to ensure that you make it into the major is to get good grades in the pre-major courses
• If you do not make it into the major when you apply, there are options:
  
  1) If you were very close to being accepted, meet with an advisor, and perhaps take courses that are not restricted to majors and plan on applying the next semester
  
  2) If you were quite far from the GPA cutoff, meet with an advisor to determine another path that will still allow you to pursue the career of your choice

** There is not a career out there that requires a Bio major and there are many careers that you may not realize exist.
How to be a successful science major: Commit to Study!

• Make sure you are studying 25-30 hours/week
• Be friends with other science or math majors! This will allow you to study and socialize at the same time
• Make an effort to attend every class meeting, prepared for that day’s topics
• Try not to work more than 20 hours/week
• Rewrite your lecture notes within 24 hours
• Participate in study groups
• Seek help as soon as you hit a rough patch; don’t wait and think things will get better.
## DEPARTMENT OF BIOLOGICAL SCIENCES
### MAJOR REQUIREMENTS – Lower Division

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1 &amp; 2</td>
<td>10</td>
</tr>
<tr>
<td>CHEM 1A &amp; 1B</td>
<td>10</td>
</tr>
<tr>
<td>CHEM 20 (or CHEM 24, 124, &amp; 25)</td>
<td>3 (or 9)</td>
</tr>
<tr>
<td>PHYS 5A &amp; 5B</td>
<td>8</td>
</tr>
<tr>
<td>MATH 26A or 30</td>
<td>3-4</td>
</tr>
<tr>
<td>STAT 1</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Lower Division Units** | **37 - 44**
Courses that Can be Substituted, from Nearby Community Colleges and UCD

<table>
<thead>
<tr>
<th>CSUS Courses</th>
<th>ARC</th>
<th>CRC</th>
<th>FLC</th>
<th>SCC</th>
<th>Sierra</th>
<th>SJDC</th>
<th>Solano</th>
<th>Yuba</th>
<th>UCD</th>
<th>other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bio 2</td>
<td>Bio 400</td>
<td>Bio 400</td>
<td>Bio 400</td>
<td>Bio 402</td>
<td>Bio 1</td>
<td>Bio 1</td>
<td>Bio 2</td>
<td>Bio 1</td>
<td>Bio 1A/1B</td>
<td></td>
</tr>
<tr>
<td>Chem 1A</td>
<td>Chem 400</td>
<td>Chem 400</td>
<td>Chem 400</td>
<td>Chem 400</td>
<td>Chem 1A or 3A/3B</td>
<td>Chem 1A</td>
<td>Chem 1</td>
<td>Chem 1A</td>
<td>Chem 2A/2B</td>
<td></td>
</tr>
<tr>
<td>Chem 1B</td>
<td>Chem 401</td>
<td>Chem 401</td>
<td>Chem 401</td>
<td>Chem 401</td>
<td>Chem 1B</td>
<td>Chem 1B</td>
<td>Chem 2</td>
<td>Chem 1B</td>
<td>/2C</td>
<td></td>
</tr>
<tr>
<td>Stat 1</td>
<td>Stat 300 or 301</td>
<td>Stat 300</td>
<td>Stat 300</td>
<td>Stat 300</td>
<td>Math 13</td>
<td>Math 12</td>
<td>Math 11</td>
<td>Stat 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Students receive lower division credit for courses taken at community colleges

^Chem 4

^ course substitutions not available, but courses noted may provide similar background in nomenclature, unit conversion, and mole theory
### DEPARTMENT OF BIOLOGICAL SCIENCES
### MAJOR REQUIREMENTS – Upper Division “New Program”

<table>
<thead>
<tr>
<th>Course</th>
<th>BA Units</th>
<th>BS Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 100: Intro. to Scientific Analysis</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>BIO 184: General Genetics</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>BIO 160: General Ecology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIO 139: General Microbiology</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>BIO 121: Molecular and Cell Biology</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>BIO 188: Evolution</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>CHEM 161: General Biochemistry</td>
<td>3</td>
<td>3*</td>
</tr>
<tr>
<td>Upper Division BIO/CHEM Electives</td>
<td>3</td>
<td>24-30</td>
</tr>
<tr>
<td><strong>Total Upper Division Units</strong></td>
<td><strong>25</strong></td>
<td><strong>33-39</strong></td>
</tr>
</tbody>
</table>
Pay Attention to Pre-requisites and Sequences of Courses
Figure out where you are in the sequence of required courses

- An evaluation of courses you have already taken for the major has been prepared, if your transcripts were available.

DON’T LOSE THIS EVALUATION!!!

- With the evaluation, the flow chart, and a little advice about course loads you will be selecting appropriate courses for fall.
Planning Your Schedule

- Make sure you have completed pre-requisite classes
- Make sure you have enough time. For a 12-15 unit class load, in a 168-hr week:

<table>
<thead>
<tr>
<th>Activity</th>
<th># hours/week</th>
<th># hrs/week remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attending Lecture, Lab, and/or Activity/Discussion</td>
<td>15-20</td>
<td>148</td>
</tr>
<tr>
<td>Study Time</td>
<td>35-40</td>
<td>108</td>
</tr>
<tr>
<td>Commuting</td>
<td>10</td>
<td>98</td>
</tr>
<tr>
<td>Eating and Sleeping</td>
<td>70</td>
<td>28</td>
</tr>
<tr>
<td>Employment</td>
<td>0-20</td>
<td>8-28</td>
</tr>
<tr>
<td>Family/Friends/Fun</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>
Planning Your Schedule

- Plan your schedule to include enough study time, even if you have to take fewer courses
  - Repeating courses adds time to your college career and can negatively influence future plans/entry into major
  - A new policy limits the number of units you can repeat (28) and number of times you can repeat a course (2)
- The average science student takes about 3 years to earn a Bachelor’s degree after transferring
- Try to aim for a mixture of science, math and GE courses when scheduling courses
Planning Your Schedule

- The Bio Sci major requires several chemistry courses. Give yourself time to make a successful transition in your first semester, and start taking Chemistry ASAP!
- Chemistry courses have a very high failure rate (~50%); access resources like PAL (Peer-Assisted Learning) sections to improve your chances for success (last year, students in PALs had a 15-30% higher pass rate!)
- To enroll in introductory chemistry, you must take the Chemistry Diagnostic Test (www.csus.edu/chem)
- If you pass the diagnostic, you may enroll in CHEM 1A.
- If you fail or do not take the diagnostic, you are routed to CHEM 4, which still requires an IAD score of 27+. IAD sample tests available at: csus.edu/math
- To take other Chemistry courses, you must have grades of C- or better in pre-requisite chemistry courses. The one exception is CHEM 1B, which requires a C or better in 1A.
What do you do if the classes you want are not available?

- Look for alternative classes not scheduled at the same time as the classes you want
- Check My Sac State during the late registration period (end of August)
- Go to class on the first day of class to try to add in person. Wait lists on My Sac State are not in effect once classes start.
- Be ready to attend class and do assignments for the first 2 weeks without a guarantee of being added.
Where can you get more help?

- The Academic Advising Center, in Lassen Hall 1013, for help with General Education, Graduation requirements and Career Advising.
- The Biological Sciences Department Office, in SQU 202, for questions about where to go next.
- NSAC (Natural Sciences Advising Center) in SQU 238, by appointment or drop-in, for help in planning science and math courses.
- Biological Sciences faculty for help in specific courses and major concentrations.
Where can you get more help?

[See white sheet of Important Links in your folder]

- **Biological Sciences Department website**, for information about courses, internships, clubs, scholarships, etc
- **Project Pass website**, for resources for your academic success.
- NSAC Facebook page “**Hot Stuff at NSAC**” for information about upcoming deadlines and events
- **University website** for information about resources for students
- **Academic Advising website** for frequently asked questions about successfully proceeding to your graduation
Where can you get more help?

- E-mail messages are sent by the University, the department, and some faculty, to inform you of important events.
- Please regularly check My Sac State and your Sac State e-mail for messages.
  E-mail will not be sent to personal e-mail accounts.
Who else can help you decide about your degree and career?

- Student Organizations
  - [http://www.csus.edu/bios/organizations.html](http://www.csus.edu/bios/organizations.html)
    - American Medical Student Association
    - BioCorps
    - Field Biology Group
    - Future Pharmacists Student Organization
    - Multicultural Organization of Science Students/Science Educational Equity
    - Pre-Dental Association
    - Student Association of Laboratory Scientists
    - Student Association of Criminalists
Who else can help you decide about your degree and career?

- Community and University Mentors
  - BIO 195: Internships (1-2 units)
    - 40 hours of supervised volunteer work with a community agency earns 1 unit of credit
  - Specialized internships in medicine, dentistry, and teaching
- BIO 197: Laboratory Assisting
- BIO 199: Independent Study
Ready to Plan?

What questions do you have?

Break-out into smaller advising groups.