Department of Chemistry and Biochemistry

CSULA Undergraduate Transfer Orientation Summer, 2018
Dr. Alison McCurdy, Chair

WELCOME!
Some Key People:

Department Chair:
Dr. Alison McCurdy
- [mailto:amccurd@calstatela.edu](mailto:amccurd@calstatela.edu)
- 323-343-2300, BS 336 (Department office)

Department Office Staff:
Ms. Maribel Estrada    Mr. Alex Czerwinski
- 323-343-2300, BS 336 (Department office)
Some Key People:

**Stockroom Manager:**
Mr. Bill Wimberley
- 323-343-2345, ASCB 251

**Manager of Instructional Labs:**
Dr. Errol Mathias
- 323-343-5648, ASCL 132

Labs: Goggles, notebook, Breakage card from the cashier!
Some Key People:

Dean of the College of Natural and Social Sciences:
Dr. Pamela Scott-Johnson
• 323-343-2000, ACSB 223

Provost and Vice President for Academic Affairs:
Dr. Lynn Mahoney

President of Cal State LA:
Dr. William A. Covino
Some Key People:

Faculty Advisors:
How can I meet with a Chemistry and Biochemistry Faculty Advisor after today?

- Principal Undergraduate Advisor: Dr. Alison McCurdy amccurd@calstatela.edu; appointments through the department office 323-343-2300
- Faculty Advisor: You are assigned based on your last name to a faculty advisor in the department. You can contact them directly by email
Some Key Places:

Department Office – 3rd floor
Biological Sciences
BS 336

Faculty Offices, Teaching labs, research labs

Annenberg Science Complex:
• La Kretz Hall or ASCL (27A)
• Rosser Hall or “Wing B” or ASCB (27B)
Some Key Websites:

**Department:**
http://www.calstatela.edu/dept/chem

*Undergraduate Handbook!* – newly revised!

**NSS Advisement Center:**
http://www.calstatela.edu/nssadvising

**E-catalog, myCSULA**
Some general advice.....

- Talk to your professors. *Whether or not* you need help in a class!
- You need to think about your GPA (for the next stage in your career), so make sure the **balance of school and other commitments allows you to focus on academic success**.
- Develop your peer network – start now! (study groups, etc.)
- Rule of thumb: **Study 3 hours outside of class per unit per week**. More for harder classes!

In groups of 3-4, introduce yourselves, your major, your career goals, and tell everyone something surprising about you.
Some general advice.....

Get involved with extracurricular activities such as:

• Chemistry and Biochemistry Club
• Pre-Pharmacy Club

Depending on your career goals, there are other experiences outside the classroom:

• Volunteering at a hospital
• Getting involved in research

There is a Health Careers Advisement Office
http://www.calstatela.edu/healthcareers
KH D 1044
healthcareers@calstatela.edu
323-343-5284
Undergraduate Degree Programs

Students graduate with:

1. **Knowledge of the Field** - Theoretical and Practical
   - Chemistry and Biochemistry - the *molecular sciences*
   - New discoveries all the time
     - New molecules
     - New methods
     - Answers to problems in environment, health, etc.

2. **Problem-solving Skills**
3. **Experience with Teamwork**
4. **Effective Communication Skills**
Undergraduate Degree Programs
B.S. Chemistry or B. S. Biochemistry

• Suitable for students seeking:
  • Entry-level jobs as chemists
  • Entry into a graduate research program (M.S., Ph.D., etc)
  • Entry into health professions schools
  • See Department web page – careers tab

• Laboratory-intensive
• Department Honors Program available
• *Calculus-based physics*
  • General Chemistry is the foundation; degree then focuses on subdisciplinary areas: Analytical, Biochemistry, Inorganic, Organic, Physical

• Opportunities for Research Experiences!!
Planning for timely graduation

• Know the Degree Requirements
  • Know your catalog year (GE vs major)
  • Degree Planner (General Catalog)
  • ORDER MATTERS! Schematic of pre-requisites in major (handout); Roadmaps (handout)
  • You must finish Gchem II, MATH 2120 and PHYS 2200 before starting physical chemistry (CHEM 4420-thermo)
  • You must finish MATH 2120 and PHYS 2200 before starting physical chemistry (CHEM 4410-quantum)
• Sample 2-year plans (department website)
Planning for timely graduation

• Some items to highlight in our requirements
  • If you took and passed a year of organic chemistry and lab, you must still take CHEM 3200 (Ochem II Lecture)
  • If you took and passed a year of organic chemistry and lab elsewhere, you may take CHEM 4300 (Introduction to Biochemistry) or CHEM 4310 (Biochemistry I lecture). You may need a permit to do this
Planning for timely graduation

- Some items to highlight in our requirements
  - CHEM 2300 (Biomolecules) is a pre-requisite for CHEM 4310 (Biochemistry I lecture)
  - CHEM 3100 (Writing for Chemists) is a pre-requisite for CHEM 4311 (Biochemistry I lab) and for CHEM 4431 (Physical Chemistry Lab)
  - CHEM 4890 (Molecular Science Capstone) counts as Upper division GE Block B – DON’T TAKE UD GE Natural sciences!
Some of your major courses “double count” for your major and for GE! So….

- BS Biochemistry majors: Don’t take any lower division GE courses in Biological Sciences, Physical Sciences, or Quantitative Reasoning!
- BS Chemistry majors: Don’t take any lower division GE courses in Physical Sciences or Quantitative Reasoning!
- All majors: Don’t take UD GE Natural Sciences! Instead, take CHEM 4890 (Molecular Science Capstone)
Planning for timely graduation

• What to take first
  • Start taking math right away!
  • Start your majors classes right away! (people unfamiliar with our degrees advise you to complete your GE first, but only do that if no other major classes are available)
  • Course offerings: some courses are offered >once a year, some only once, and some every other year! [This list is available on the department web page!]
MATH Sequences for STEM majors

Transfer Students

Equivalent of Math 1081 PreCalculus: Functions (3)

Equivalent of Math 1040 PreCalculus (6)

Equivalent of Math 2110 Calculus I (4)

Equivalent of Math 2120 Calculus I (4)

Math 1082 PreCalculus: Functions, with lab (4)

Math 1083 PreCalculus: Trigonometry (4)

Math 2110 Calculus I (4)

Math 2120 Calculus II (4)

Math 2130 Calculus III (3)

Math 2111 Calculus I workshop

Math 2121 Calculus II workshop

Math 2131 Calculus III workshop

Cal State LA Students Math Support needed

Cal State LA Students No Math Support needed

OR

Math 1040 PreCalculus (6)
How do I know what requirements I still need to take?

1. Degree planner in catalog. This is for BS Biochemistry. Use it to check off major requirements as you go.

2. Degree checklist from NSS Advisement Center. Use it to check off major and GE requirements as you go.

(BUT: lists don’t tell you what order you need to do them in!)
How do I know what requirements I still need to take?

There are also Degree planners and checklists for BS Chemistry. Use it to check off major requirements as you go....
How do I know what requirements I still need to take?

3. Academic Requirements in GET. This is what matters!

(BUT: lists don’t tell you what order you need to do them in!)
What should you take this semester?
This scheme shows the **order** of classes – but you must adapt it to YOUR situation (what math are you starting in, etc.)

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**Solid arrows are pre-requisites (MUST be completed with a C- or better before taking the course)**

**Dashed arrows are co- or pre-requisites (MUST be completed with a C- or better before taking the course OR during the same term as the course)**

- *Satisfactory completion of GWAR is a pre-requisite*
- ***Also requires passing grade on the GWAR, completion of Blocks A and B4, an additional course from Block B, and at least one course each from blocks C and D.***

Remember that if you are a BS Biochemistry major, you should NOT take lower division GE Biological Sciences; lower division GE Physical Sciences, or lower division GE quantitative reasoning because your major coursework satisfies these requirements. CHEM 4890 satisfies Upper division GE Block B.

Revised 7/17
What should **you** take next?

1. Check off all you have already taken. Example: you are calculus ready and you have taken Gen CHEM II
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2. Follow the arrows from these and circle all courses you are able to take.
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1. Check off all you have already taken. Example: you are calculus ready and you have taken Gen CHEM II

2. Follow the arrows from these and circle all courses you are able to take. In this example they are Calculus I, Biology I, Quant, Ochem I, and Ochem Lab I. (And any missing GE). Prioritize classes that are pre-requisites to other classes.
BS Chemistry majors can follow the same process to decide what to take (cross off what has been taken, etc)

Solid arrows are pre-requisites (MUST be completed with a C- or better before taking the course)
Dashed arrows are co- or pre-requisites ((MUST be completed with a C- or better before taking the course OR during the same term as the course)

* Satisfactory completion of GWAR is a pre-requisite
** Take two of these three Advanced Analytical (AA) courses
*** Also requires passing grade on the GWAR, completion of Blocks A and B4, an additional course from Block B, and at least one course each from blocks C and D.

Remember that if you are a BS Chemistry major, you should NOT take lower division GE Physical Sciences or lower division GE quantitative reasoning because your major coursework satisfies these requirements. CHEM 4890 satisfies Upper division GE Block B.

Revised 7/17
Registration Today

• If you believe you have taken a chemistry course pre-requisite and it doesn’t show up appropriately on your CAAR, you won’t be able to register for that class. Today we will issue a permit (come see me, then Mr. Czerwinski). You must ALSO make an appointment with the Department chair to permanently fix this so you will be able to register and graduate!

• For OTHER departments’ courses with those issues, you must go to that department to obtain a permit for registration (bring your unofficial transcript):
Registration Today

If needed classes are closed:
• Come to the first day of class in case instructors can add you due to students dropping
• Sometimes additional sections are authorized during the first week of classes if the course wait list is long enough, so be alert
• Today, also indicate on the sign up sheet what courses you are ready to take but there is no space in them
Registration Today

2200: 39 spots available
2201: 13 available
2211: 26 available
2300: 9 available
3100: 8 available
3200: 23 spots available
3500: 0 available – 18 waiting
3600: 0 available - 5 waiting (may be able to add up to 10 students or change rooms)
4300: 0 available - 9 waiting (but 3200 or Ochem II at CC as pre-req). (may be able to get a bigger room)
4310: 20 spots available
4311: 6 waiting – 0 spots available (but 3100 pre-req)
4410: 25 spots available (but math 2150 and phys II prereq)
4420: 17 spots available (but Calc II and Phys II prereq)
UD chem electives – open spots available
While you are at Cal State LA, you will discover/confirm what you love to do and what your strengths are.

Combine these with your degree in Chemistry or Biochemistry (perhaps even a minor as well?) and pursue a satisfying and rewarding career!
Thanks and good luck!

QUESTIONS?