

Studying the Biological Sciences

Course Syllabus

Inter-Departmental Studies (IDS) c96
Molecular & Cell Biology, Integrative Biology, & Plant Biology

PART I – Our Course

Description

IDS c96 is an introduction to the culture of the university and university biology. You will learn concepts, skills, and information that will assist you in the short term with your courses, and in the long term, as you progress through a major toward a science-related career.

The overall goal of the course is to allow you to make informed decisions that will help you best express your passion for and interest in the biological sciences. The course content will be a balance between 1) conceptual models that will help you understand the larger societal issues that surround the study and practice of biology, and 2) practical information that will be immediately useful to you.

Teaching Team

Dr. John Matsui (Instructor) matsui@berkeley.edu
2016 VLSB Dept. of Integrative Biology

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4th Year Major: MCB (Biochemistry)

Meetings, Units, and Grades

Lectures TU/TH 12-1 PM 212 Wheeler 1 Unit Pass/Not Pass

Safety Protocols

As You Enter the Classroom

- There will be containers of sanitizing wipes at the front of the room. If you wish, please take one to wipe your hands and the chair and table surface where you choose to sit.

Seating

- Sit to maintain a physical distance of ~ 6' between you and your classmates.
- Both tables and chairs in the room are on wheels. We suggest that you sit in groups of 4 around two rectangular tables that you place together.

Masks

- At this time, mask wearing at UC Berkeley is not required. For your health and that of others, we request/advise that you please wear a mask when you enter and throughout the entire class period. This is a request and not a requirement. If wearing a mask is difficult or if you object, please have a private conversation with us.

Attendance

- You will record your presence using a QR code to access an on-line Google form attendance sheet.
- Look for the QR code printed on sheets of paper in the room.

- Scan the code to your phone, go to the Google form and fill it out to indicate your presence. If your phone does not have a camera, use the link on the sheet to go to the form.

Course Format

The course will consist of assigned scholarly and popular readings, presentations by the Teaching Team and guest speakers, regular short 'feedback' assignments, lectures, and small/large group discussions. The format will be interactive and will involve your questions, perspectives, and participation.

Topics covered will include

1. Learning Styles
2. Time Management
3. Problem Solving
4. Reading Scientific Texts and Articles
5. Test Taking
6. History of Science Education
7. Diversity & the Future of Science
8. Groups in the University & in Biology
9. Research
10. Questions in Biology
11. Collaboration in Biology
12. Predictors of Undergraduate Success
13. Science and Society Interactions and Relationships
14. Disciplines as "Cultures" and the Culture of Biology
15. Career and Major Options in Biology
16. Your Place and Importance in Science

Course Objectives

1. Provide models and opportunities for you to develop your analytical and communication skills.
2. Present information and further develop your fundamental skills to improve your performance in STEM courses.
3. Provide a conceptual and factual overview of biology and the University to help you make informed choices about your major and career.
4. Introduce scholarly studies that examine the 'culture' of academia in general and STEM in particular so that you can become a more efficient and effective participant in the scholarly community.
5. Assist you to integrate the university experience with other aspects of your life.

Grading

The Pass/Not Pass grade will be based in part on your completion of and performance on all of the assigned exercises (details will follow). To receive a 'Pass,' you must satisfy all of the evaluation criteria below:

1. Complete all of the exercises.
2. Have no more than two (2) 'unexcused' absences.

Lecture Topics (Topics and their order may change)

| <u>Lecture</u> | <u>Date</u> | <u>Topic</u> |
|----------------|-------------|--|
| 1 | 8.25 | IDS c96 – It's Value This Semester and Beyond |
| 2 | 8.30 | Biology at Berkeley - What you hope to Learn |
| 3 | 9.1 | The Importance of Fundamentals Notetaking Part 1 - Lecture on 'Science and Science Education' An Inventory - Your Questions and Concerns |
| 4 | 9.6 | TBD |
| 5 | 9.8 | TBD |
| 6 | 9.13 | Notetaking Part 2 - Advancing Your Practice Your Questions and Concerns |
| 7 | 9.15 | Reading and Studying Science – Working Smart, Not Just Hard |
| 8 | 9.20 | Learning Styles – 'One Size' Does not Fit All |
| 9 | 9.22 | Collaboration in Science – The Way It's Supposed to Work |
| 10 | 9.27 | Counter-Collaborative Undergraduate Education Part 1 |
| 11 | 9.29 | Counter-Collaborative Undergraduate Education Part 2 |
| 12 | 10.4 | Culture of the Biological Sciences |
| 13 | 10.6 | Biology at Berkeley – The Map |
| 14 | 10.11 | Mid-Semester Check-in |
| 15 | 10.13 | Time Management, Perfectionism, and Procrastination |
| 16 | 10.18 | Choosing a Major and Career |
| 17 | 10.20 | Mentoring |
| 18 | 10.25 | Entering the Culture of Science Part 1 |
| 19 | 10.27 | Entering the Culture of Science Part 2 |
| 20 | 11.1 | What is Research? |
| 21 | 11.3 | Underrepresentation in STEM Part 1 |
| 22 | 11.8 | Underrepresentation in STEM Part 2 |
| 23 | 11.10 | Diversity Lessons from the Biology Scholars Program |
| 24 | 11.15 | Safe-Spaces and Kindness in STEM Part 1 |
| 25 | 11.17 | Safe-Spaces and Kindness in STEM Part 2 |
| - | 11.22 | No Class |
| 26 | 11.29 | Looking Back - The Semester |
| 27 | 12.1 | Looking Forward – Your Future, Short and Long-Term |

Classroom Climate

We are all responsible for creating a learning environment that is welcoming, inclusive, equitable, and respectful. The expectations in all classes are that students and instructors will live up to this responsibility, even during vigorous debate or disagreement, and that exclusionary or harassing behavior will not occur. If, as a student, you feel that these expectations are not being met, you can consult your instructors or seek assistance from the campus resources listed below.

PART 2 – Our Larger Context

Academic Accommodations

The purpose of academic accommodations is to ensure that all students have a fair chance at academic success. Disability, or hardships such as basic needs insecurity, uncertain documentation and immigration status, medical and mental health concerns, significant familial distress, and experiencing sexual violence or harassment, can affect a student's ability to satisfy particular course requirements. Students have the right to academic accommodations and to resources, without having to disclose personal information to instructors.

- [ACCOMMODATION OF RELIGIOUS CREED](#)(link is external)
- [CONFLICTS BETWEEN EXTRACURRICULAR ACTIVITIES AND ACADEMIC REQUIREMENTS](#)(link is external)
- [ABSENCES DUE TO ILLNESS](#)(link is external)(link is external)
- [ACCOMMODATION FOR DISABILITY](#)(link is external)(link is external)
- [ACCOMMODATION FOR PREGNANCY AND PARENTING](#)(link is external)(link is external)
- [READING, REVIEW, RECITATION \(RRR\) WEEK](#)(link is external)
- [COMMENCEMENT CEREMONIES AND FINAL EXAMS](#)(link is external)
- [SEXUAL VIOLENCE/SEXUAL HARASSMENT ACCOMMODATIONS](#)(link is external)
- [HARDSHIP ACCOMMODATIONS](#)(link is external)(link is external)

Support Resources

The following campus offices offer support, and can help you understand your rights and options regarding specific kinds of accommodations.

Note: while all of these offices listed keep your personal information private in adherence to the law and university policy, there is a reporting requirement in cases of gender discrimination or harassment (including sexual violence and harassment). Faculty, GSI's, and all campus offices other than those marked "**Confidential**," below, are considered "**Responsible Employees**," meaning that they are required to share reports of sexual violence or sexual harassment with OPHD, the campus Title IX office. Unless there is imminent risk of serious harm, Confidential Resources cannot share information without your express consent, and receiving support from a confidential resource does not trigger a report to the university.

1. Basic Needs Center

- Assists students with urgent housing, food, or financial situations by appointment or drop-in
- Website: basicneeds.berkeley.edu(link is external)(link is external)

2. Center for Support and Intervention

Advises students experiencing significant hardships and consults with faculty and staff who are concerned about students.

Email: csi@berkeley.edu(link sends e-mail) | Phone: (510) 664-4218 | Website: sa.berkeley.edu/csi(link is external)

3. Counseling and Psychological Services (CAPS) at University Health Services [Confidential]

- Free short-term and crisis counseling and psychiatry for students
- Phone: (510) 642-9494 | After-hours urgent support: (855) 817-5667
| Website: uhs.berkeley.edu/caps(link is external)(link is external)
- See [ABSENCES DUE TO ILLNESS](#)(link is external)(link is external) and [ACCOMMODATION FOR DISABILITY](#)(link is external)(link is external)

4. Disabled Students' Program

- Students who need disability-related academic accommodations, or have questions about their eligibility, should contact DSP.
- Email: dsp@berkeley.edu(link sends e-mail)(link sends e-mail) | Voice: (510) 642-0518 | TTY: (510) 642-6376 | Website: dsp.berkeley.edu(link is external)(link is external)
- See [ACCOMMODATION FOR DISABILITY](#)(link is external)

5. Office for the Prevention of Harassment and Discrimination (OPHD)

- The campus Title IX office; receives and addresses reports of discrimination, harassment, and sexual violence.
- Email: ask_ophd@berkeley.edu(link sends e-mail)(link sends e-mail) | Website: ophd.berkeley.edu(link is external)(link is external) | Phone: (510) 643-7985
- See [SEXUAL VIOLENCE/SEXUAL HARASSMENT ACCOMMODATIONS](#)(link is external)

6. PATH to Care Center [Confidential]

- Affirming, empowering, confidential support for those who have experienced any forms of sexual and relationship violence, harassment, or stalking.
- Phone: (510) 642-1988 | 24/7 Urgent Support Care Line: (510) 643-2005
| Website: care.berkeley.edu(link is external)(link is external)
- See [SEXUAL VIOLENCE/SEXUAL HARASSMENT ACCOMMODATIONS](#)(link is external)(link is external)

7. Social Services at University Health Services [Confidential]

- Free counseling, case management, and consultations for students
- Phone: (510) 642-6074 | After-hours urgent support: (855) 817-5667
Website: uhs.berkeley.edu/social-services(link is external)(link is external)
- See [and ACCOMMODATION FOR DISABILITY](#)(link is external)(link is external) and [SEXUAL VIOLENCE/SEXUAL HARASSMENT ACCOMMODATIONS](#)(link is external)(link is external) and [ACCOMMODATION FOR PREGNANCY AND PARENTING](#)

8. Emergency Back-up Child Care and Financial Support for Student Parents and Caregivers

- Parents who are currently registered Berkeley students are eligible for highly-subsidized back-up child care from a leading nationwide provider of care services. This back-up program helps student parents when their regular child care arrangements are unavailable and they need to attend to academic responsibilities on campus, at home, or away. Visit the **Back-Up Child Care website**.
- Registered student parents (single or married) with dependent children, or those caring for dependent adults may apply for a variety of aid programs. Visit the centralized resources available on the Student Parent Center website.