

Calculus for the Biological Science

Math: 1460 (22M:016):000A, B Fall 2021

Prerequisites:

MATH:1440 with a minimum grade of C- or MATH:1020 with a minimum grade of C- or (MATH:1005 with a minimum grade of C- and MATH:1010 with a minimum grade of C-) or ALEKS score of 70 or higher or (ALEKS score of 55 or higher and MATH:1010 with a minimum grade of C-) or (MATH:1010 with a minimum grade of C- and MATH:1340 with a minimum grade of C-) or MPT Level 3 score of 9 or higher

Approved GE: Quantitative or Formal Reasoning.

Instructor: Xiaoyi Zhang

Lecture Time and zoom link for 000A: 1:30-2:20P JoinURL: <https://uiowa.zoom.us/j/99355543848>

Lecture Time and location for 000B: 2:30-3:20P Join URL: <https://uiowa.zoom.us/j/91302824788>
(Please do not switch sections as there will be pop quiz on class with recorded grades).

Office and Telephone: 25E MLH, 335-0785

E-mail: xiaoyi-zhang@uiowa.edu

Office Hours: Tuesdays 9:00-11:30 and by appointments.

Join URL: <https://uiowa.zoom.us/j/93773619373>

Discussion Session: (All the policies contained in this syllabus apply for all discussion sessions)

Alex Pang alexander-pang@uiowa.edu

Section 0071 9:30-10:20a 221 MLH;

Elise Askelsen elise-askelsen@uiowa.edu

Section 0081 8:30-9:20p 217 MLH; Section 0101 7:30-8:20p 205 MLH

Section 0122 12:30-1:20 210 MLH

Adriana Fernandez adriana-fernandeziquero@uiowa.edu

Section 0082 8:30-9:20a 214 MLH; Section 0121 5:00-5:50p 3321SC

Section 0331 3:30-4:20p 214 MLH

Kerry Tarrant kerry-tarrant@uiowa.edu

Section 0091 9:30-10:20a 218 MLH; Section 0332 3:30-4:20 210 MLH

Section 0431 5:00-5:50 221 MLH

George Clare Kennedy george-clarekennedy@uiowa.edu

Section 0132 5:00-5:50p 22SH

Zack Bryhtan zachary-bryhtan@uiowa.edu

Section 0231 5:00-5:50p 66SH

Juan Felipe Ariza Mejia juanfelipe-arizamejia@uiowa.edu

Section 0131 5:00-5:50p 3315SC

Miguel Barquinero enrique-barquinero@uiowa.edu

Section 0432 5:00-5:50p 218 MLH

Supervisor: For this course, see the DEO.

DEO Contact Information: Professor Weimin Han 14 MLH, 319-335-0714, weimin-han@uiowa.edu

Goals and Objectives of the Course:

This is a one-semester survey of calculus primarily for students in the biological or life sciences. It includes a non-theoretical treatment of differential and integral calculus and a brief introduction to differential equations, with applications to the life sciences. Three lectures given weekly by a faculty member are complemented by two small group discussions led by TA. Students desiring a one-semester terminal calculus course may take this class; life science students wanting a more thorough course or planning to take mathematics beyond first-year calculus should take instead the traditional calculus sequence Math:1850-Math:1860 (22M:025-22M:026). By the end of this course you should have improved logic skills, be an expert at pre-calculus and have learned basis calculus. Prerequisite: Math:1440 (22M:015) or satisfactory score on math replacement exam.

Textbook: Greenwell, Ritchey, Lial — Calculus for the Life Sciences 2015, Pearson, Second Edition

Required Equipment: No calculators are allowed for the exams.

Grading: We will use norm-based grading according to the recommendation of the grade distribution given by CLAS (see below)

Course Level	A	B	C	D	F
Elementary courses (1000-1999)	15%	34%	40%	8%	3%

We will only curve the final overall grade (not individual grade) within the discussion sections led by the same TA.

Midterms:

Mid I (20%): Sep 29 Wed. There will be couple of hours window on that day during which you can enter the exam and take it. Lockdown browser is required on your PC in order to take the exam.

Mid II (20%): Nov 10 Wed.

Final (35%): TBA.

Quiz (15%): There will be quizzes in the first weekly TA sessions starting second week of the semester. Each quiz will be based on the homework just finished on Sunday before.

Homework (10%): Homework has been assigned on MyMathLab which can be accessed on ICON. Pearson representative will be holding office hours the first two days of the first week:

Pearson MyLab/Mastering/REVEL/eText ON CAMPUS STUDENT SUPPORT

WHEN:

Monday, Aug 23, 10:30am - 12pm, 1pm - 4pm

Tuesday, Aug 24, 9:30am - 2pm

WHERE:

University of Iowa Chemistry Building

Room E233

WHO:

All students, all faculty needing in person support for Pearson courseware.

You are welcome to attend the office hour if you run into any technical issues. You can also get help from their 24 hour support center:

If a student is unable to meet us in person, please share this link with your students for online 24-hour student help:

<https://support.pearson.com/getsupport/s/contactsupport>

Contact Support

Contact a Pearson Support representative if you cannot find an answer in our Community.

support.pearson.com

Reading Assignment: It is strongly recommended that you read the book concurrently with the course.

Course resources: Course materials will be accessible on ICON.

Math Tutorial Lab (for drop-in help) - 125 MLH Open many hours each week, staffed by Math Dept TAs. All the Lab TAs help students in all introductory classes, including Math:1460 (22M:16). You can drop in for help at any time the lab is open, not only when your own instructor is there. See the web page

<https://math.uiowa.edu/math-tutorial-lab>

for details, including the regular hours.

Rule for Exams, Quizzes and Homework:

Please talk/email to your TA if you have issues with homework and quizzes.

Homework must be submitted on time. The due time for each homework is firm.

Make-up quizzes will be scheduled only for those who have valid compelling reasons as defined in University policies. Contact your TA for the makeup quizzes.

A Make-up Midterm exam is also possible for those who have **valid compelling reasons** as defined in University policies. The instructor might ask further appropriate documentation. All the adding, dropping and switching of the discussion sessions are handled by the TAs.

The final examination date and time will be announced on ICON. There will be **NO MAKE-UP** for the Final Exam under any circumstance. Do not make your end of the semester travel plans until the final exam schedule is made public.

Student Collaboration: Homework collaboration is not allowed for this course. Should you have any question about the homework, talk to the instructor or TA.

Remark: This course plan may be modified during the semester. Such modifications will be announced in advance during class periods; the student is responsible for keeping abreast of such changes.

Due to the late hour of midterms, there will be two no classes for two days. We have no class on Sep 29 and Nov 10. TA sessions are running regularly during those periods.

COLLEGE OF LIBERAL ARTS AND SCIENCES Information for CLAS Undergraduates Fall 2021

ATTENDANCE AND CLASSROOM EXPECTATIONS

Students are responsible for attending class and for knowing an instructor's attendance policies, which vary by course and content area. All students are expected to attend class and to contribute to its learning environment in part by complying with University policies and directives regarding appropriate classroom behavior or other matters.

ABSENCES

Students are responsible for communicating with instructors as soon they know that an absence might occur or as soon as possible in the case of an illness or an unavoidable circumstance. Students can use the CLAS absence form to help communicate with instructors who will decide if the absence is excused or unexcused; the form is located on ICON within the top banner under "Student Tools." Delays by students in communication with an instructor could result in a forfeit of what otherwise might be an excused absence (<https://clas.uiowa.edu/students/handbook/attendance-absences>).

ABSENCES: ILLNESS, UNAVOIDABLE CIRCUMSTANCES, AND UNIVERSITY SPONSORED ACTIVITIES

Students who are ill, in an unavoidable circumstance affecting academic work, or who miss class because of a University sponsored activity are allowed by UI policy to make up a missed exam. Documentation is required by the instructor except in the case of a brief illness. Students are responsible for communicating with instructors as soon as the absence is known (<https://opsmanual.uiowa.edu/students/absences-class#8.1>).

ABSENCES: HOLYDAYS

Reasonable accommodations are allowed for students whose religious holy days coincide with their classroom assignments, tests, and attendance if the student notifies the instructor in writing of any such religious Holy Day conflicts *within the first days of the semester and no later than the third week*. (See the UI Operations Manual, <https://opsmanual.uiowa.edu/students/absences-class#8.2>).

ABSENCES: MILITARY SERVICE OBLIGATIONS

Students absent from class due to U.S. veteran or U.S. military service obligations (including military service-related medical appointments, military orders, and National Guard Service obligations) must be excused without penalty. Instructors must make reasonable accommodations to allow students to make-up exams or other work. Students must communicate with their instructors about the expected possibility of missing class as soon as possible. (For more information, see <https://opsmanual.uiowa.edu/iv-8-absences-class%C2%A0-0>).

ACADEMIC MISCONDUCT

All undergraduates enrolled in courses offered by CLAS have in essence agreed to the College's Code of Academic Honesty. Academic misconduct affects a student's grade and is reported to the College which applies an additional sanction, such as suspension. Outcomes about misconduct are communicated through UI email (<https://clas.uiowa.edu/students/handbook/academic-fraud-honor-code>).

ACADEMIC ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

UI is committed to providing an educational experience that is accessible to all students. A student may request academic accommodations for a disability (such as a mental health, attention, learning, vision, and a physical or health-related condition) through the Student Disability Services (SDS) office. The student is responsible for discussing specific accommodations with the instructor. Note that accommodations are not granted retroactively but from the time of the student's request to the instructor onward; additionally, accommodations must be requested at least two weeks in advance of the related assignment or exam (<https://sds.studentlife.uiowa.edu/>).

CLASS RECORDINGS: PRIVACY AND SHARING

Course lectures and discussions are sometimes recorded or live-streamed. These are only available to students registered for the course and the intellectual property of the faculty member. These materials may not be shared or reproduced without the explicit written consent of the instructors. Students may not share these recordings with those who are not enrolled in the course; likewise, students may not upload recordings to any other online environment. Doing so is a breach of the Code of Student Conduct and could be a violation of the Federal Education Rights and Privacy Act (FERPA); also see <https://dos.uiowa.edu/policies/code-of-student-life/>.

COMMUNICATION: UI EMAIL

Students are responsible for all official correspondences sent to their UI email address (uiowa.edu) and must use this address for any communication with instructors or staff in the UI community ([Operations Manual, III.15.2](#)). Emails should be respectful and brief, with complex matters addressed during the instructor's drop-in hours, for example. Faculty are not expected to answer email after business hours or during the weekends.

COMPLAINTS ABOUT ACADEMIC MATTERS

Students with a complaint about a grade or a related academic issue should first visit with the instructor and then with the course supervisor (if one is assigned), and next with the Chair of the department or program offering the course. If not resolved, students may bring their concerns to the College of Liberal Arts and Sciences: <https://clas.uiowa.edu/students/handbook/student-rights-responsibilities>.

FINAL EXAMINATION POLICIES

The final exam schedule is published during the fifth week of the fall and spring semesters or on the first day of summer classes; *students are responsible for knowing the date, time, and place of their final exams*. Students should not make travel plans until knowing this information. A student with exams scheduled on the same day and time or who have more than two final exams on the same day should visit this page for how to resolve these problems by the given deadline: <https://registrar.uiowa.edu/makeup-final-examination-policies>. No exams may be scheduled the week before finals; some exception, however, have been made for labs, language courses, and off-cycle courses (<https://registrar.uiowa.edu/final-examination-scheduling-policies>).

FREE SPEECH AND EXPRESSION

The University of Iowa supports and upholds the First Amendment protection of freedom of speech and the principles of academic and artistic freedom. We are committed to open inquiry, vigorous debate, and creative expression inside and outside of the classroom. Visit Free Speech at Iowa for more information on the University's policies on free speech and academic freedom (<https://freespeech.uiowa.edu/>).

HOME OF THE COURSE

The College of Liberal Arts and Sciences (CLAS) is the home of this course, and CLAS governs the course's add and drop deadlines, the "second-grade only" option (SGO), and other undergraduate policies and procedures. Different UI colleges may have other policies or deadlines. See <https://clas.uiowa.edu/students/handbook>. Questions? Contact CLAS at clasps@uiowa.edu or 319-335-2633.

MENTAL HEALTH

Students are encouraged to seek help as a preventive measure or if feeling stressed or overwhelmed. Students should talk to their instructors for guidance with specific class-related concerns and are encouraged to contact University Counseling Service (UCS) at 319-335-7294 during regular business hours to schedule an appointment. USC offers group and individual therapy as well as counseling for couples about relationships while making referrals to other resources (<https://counseling.uiowa.edu/>). Student Health can also address related concerns (<https://studenthealth.uiowa.edu/>). These visits are free to students. After hours, students are encouraged to call the Johnson County Community Crisis Line at (319) 351-0140 or dial 911 in an emergency.

NONDISCRIMINATION IN THE CLASSROOM

The University of Iowa is committed to making the classroom a respectful and inclusive space for people of all gender, sexual, racial, religious, and other identities. Toward this goal, students are invited in MyUI to optionally share the names and pronouns they would like their instructors and advisors to use to address them. The University of Iowa prohibits discrimination and harassment against individuals based on race, class, gender, sexual orientation, national origin, and other identity categories indicated by the University's Human Rights policy. Contact the Office of Equal Opportunity and Diversity at <https://diversity.uiowa.edu/division/office-equal-opportunity-and-diversity-eod>.

SEXUAL HARASSMENT

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff; all members of the UI community are expected to conduct themselves in a manner that maintains an environment free from sexual harassment and sexual misconduct. Those experiencing sexual harassment are strongly encouraged to report the incidents and to seek help (<https://osmrc.uiowa.edu/>).