

Course Syllabus

[Jump to Today](#)

 Edit

The University of Iowa
The College of Liberal Arts and Sciences

Spring 2024

MATH:1460:000A Calculus for the Biological Sciences

12:30P - 1:20P MWF SHAM [LIB](#)  (<https://facilities.uiowa.edu/building/0136>)

Instructors: Hao Fang

Office location: 25K MLH

Student drop-in hours: MWF 10:00-10:25, 1:30-1:55pm (Students are invited to drop by during these hours to discuss questions about the course material or concerns. I am also available by appointment.)

Phone: 319-335-0772

E-mail: hao-fang@uiowa.edu (<mailto:hao-fang@uiowa.edu>)

DEO: [Ryan Kinser](https://math.uiowa.edu/people/ryan-kinser) (<https://math.uiowa.edu/people/ryan-kinser>) ryan-kinser@uiowa.edu (<mailto:ryan-kinser@uiowa.edu>) **Office:** 14A MLH/25F MLH

Course Home: The College of Liberal Arts and Sciences (CLAS) is the home of this course, and CLAS governs the add and drop deadlines, the “second-grade only” option (SGO), academic misconduct policies, and other undergraduate policies and procedures. Other UI colleges may have different policies.

Description of Course: One-semester survey of calculus for students in biological or life sciences; nontheoretical treatment of differential and integral calculus; brief introduction to differential equations and probability with calculus, with applications to the life sciences.

Objectives and Goals of the Course:

This course 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 and probability with calculus, with applications to the life sciences. Three lectures given weekly by a faculty member are complemented by two small group discussions led by a TA. Students desiring a one-semester terminal calculus course may take this course; life science students wanting a more thorough course or planning to take mathematics beyond first-year calculus should take MATH:1850 and MATH:1860 (traditional

calculus sequence) instead of this course. A graphing calculator is usually required. Students are encouraged to use the Math Tutorial Laboratory (McLean Hall) and SI-PLUS program (Academic Resource Center – ground floor of the IMU Room #G010), for additional help.

0. Required Course Materials: For this course, you are required to have

1. Textbook: Calculus for the Life Sciences, 2nd Edition, by Greenwell, Ritchey, and Lial.

The textbook will be available to you in ICON, and you will be billed for it through the option called ICON DIRECT. This means you do NOT have to purchase materials outside of this set up and your UBill will be auto charged and the lowest possible price for students.

2. Access to a MyLab Math account for completing homework online. (Billed to UBill and available through ICON.)

Material to be covered from the Text: Chapters 1 through 8 and Chapter 11 (excluding Sections 5.4, 6.5, 11.4, 11.5, and 11.6) will be covered in this class.

ICON: Class information, homework assignments, and grades will be posted on ICON. I recommend you check it daily.

Drop Deadline for this Course

You may drop an individual course before the deadline; after this deadline you will need collegiate approval. You can look up the [drop deadline for this course \(https://registrar.uiowa.edu/course-deadlines\)](https://registrar.uiowa.edu/course-deadlines) here. When you drop a course, a “W” will appear on your transcript. The mark of “W” is a neutral mark that does not affect your GPA. Directions for adding or dropping a course and other registration changes can be found on the [Registrar’s website \(https://registrar.uiowa.edu/change-registration-myui\)](https://registrar.uiowa.edu/change-registration-myui). Undergraduate students can find policies on dropping CLAS courses [here \(https://clas.uiowa.edu/students/students-academic-policies/registration-policies#dropping\)](https://clas.uiowa.edu/students/students-academic-policies/registration-policies#dropping). Graduate students should adhere to the [academic deadlines \(https://grad.uiowa.edu/academics/deadlines\)](https://grad.uiowa.edu/academics/deadlines) and policies set by the Graduate College.

Grading System and the Use of +/-:

This course uses the plus or minus grading system. Note that A+ grades are given only in extraordinary situations.

Final grades will be awarded based on the following minimal cutoffs:

A+ 97 B+ 80 C+ 65 D+ 45 F 30

A 90 B 75 C 55 D 40

A- 85 B- 70 C- 50 D- 35

Assignments and Percentage of Final Grade:

Weekly homework assignments are given on Fridays and collected on Wednesdays.

Course Grades

Final course grades will be assessed based on your performance in the following activities:

Weekly Homework: 15%

Quiz: 15%

1st Midterm Exam (Feb 21 Wednesday): 20%

2nd Midterm Exam (April 3 Wednesday): 20%

Final Exam: 30%

language for homework and quizzes: *Weekly homework will be assigned and collected and graded for completion and accuracy.* To ensure that students are completing the course readings and understanding the material, quizzes will be given during the class and discussion time. They will evaluate key information presented in the course readings for the time covered by the quiz.

language for class participation: Regular and prompt attendance is strongly encouraged for this course. It is in your interest to attend every class and to arrive with significant contributions to make to discussions. Participation in this class includes making lists of issues for class discussion and giving prepared, oral responses to questions. In general, no makeup quizzes will be given. Lowest 3 quiz and homework grades will be dropped.

language for exams: Two exams of equal weight will be given. Each exam will cover material from approximately half of the course, including information presented in lecture, discussion section, and the assigned readings. The exams will test student's knowledge of basic concepts, terms, and general trends discussed in the course. Study guides will be discussed in class before the exam. Suggested study techniques for the exam are for the student to complete all the suggested readings for the exam and then to use course notes, and readings to be sure that they are familiar with all the terms and concepts outlined in review sessions.

No makeup quizzes will be given. The lowest 3 homework/quiz scores will be dropped.

Date and Time of the Final Exam

The [final examination date and time \(https://registrar.uiowa.edu/final-exam-schedules\)](https://registrar.uiowa.edu/final-exam-schedules) will be announced by the Registrar generally by the fifth week of classes and it will be announced on the course ICON site once it is known. **Do not plan your end of the semester travel plans until the final exam schedule is made public. It is your responsibility to know the date, time, and place of the final exam.** According to Registrar's final exam policy, students **have a maximum of two weeks after the announced final exam schedule** to request a change if an exam conflict exists or if a student has more than two exams in one day (see the [policy \(https://registrar.uiowa.edu/makeup-final-examination-policies\)](https://registrar.uiowa.edu/makeup-final-examination-policies) here).

Calculators and other electronic devices: You may use calculators or other electronic devices for homework problems. But calculators and any other electronic devices are not permitted during exams or quizzes.

Collaboration: The MyLab Assignments for this course are designed to help you master your knowledge related to the topics covered during the lectures. As such, you may work on these assignments with others, but each student has to submit his/her own solutions to the MyLab Assignments. However, please be aware that to master the skills needed for this class, practice is required and that to do well on the quizzes and exams you will need to work lots of problems multiple times without help. Be sure to test your knowledge by doing as much of the assignments as possible on your own.

NO collaboration is allowed on quizzes and exams. Any sign of collaboration or sharing of answers will be considered academic misconduct and reported to the College.

Academic Honesty and Misconduct: All students in CLAS courses are expected to abide by the CLAS Code of Academic Honesty. Undergraduate academic misconduct must be reported by instructors to CLAS according to these procedures.

Student Complaints: Students with a complaint about a grade or a related matter should first discuss the situation with the TA and/or Professor Han, and finally with the Department Chair. Students should contact CLAS Undergraduate Programs for support when the matter is not resolved at the previous level.

Drop Deadline for this Course: You may drop an individual course before the deadline; after this deadline you will need collegiate approval. You can look up the drop deadline for this course here. When you drop

a course, a “W” will appear on your transcript. The mark of “W” is a neutral mark that does not affect your GPA. Directions for adding or dropping a course and other registration changes can be found on the Registrar’s website. Undergraduate students can find policies on dropping CLAS courses here.

Attendance and Absences: You are required to attend all lectures and discussions. Attendance will be taken regularly. If you must miss a class, you are still responsible for the material discussed in class and for all the announcements made in class.

University regulations require that students be allowed to make up examinations that have been missed due to illness, religious holy days, military service obligations (including service-related medical appointments), or other unavoidable circumstances or University-sponsored activities. Such circumstances do not include attendance at a wedding, a family vacation, obligations related to work or other such matters. Students with UI-authorized activities must discuss their absences with the instructor as soon as possible. Religious obligations must be communicated within the first three weeks of classes.

Communication: 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. For the privacy and the protection of student records, UI faculty and staff can only correspond with UI email addresses.

Mental Health Resources and Student Support: Students are encouraged to be mindful of their mental health and seek help as a preventive measure or if feeling overwhelmed and/or struggling to meet course expectations. Students are encouraged to talk to their instructor for assistance with specific class-related concerns. For additional support and counseling, students are encouraged to contact University Counseling Service (UCS). Information about UCS, including resources and how to schedule an appointment, can be found at counseling.uiowa.edu. Find out more about UI mental health services at mentalhealth.uiowa.edu.

Student Care and Assistance provides assistance to University of Iowa students who are experiencing a variety of crisis and emergency situations, including but not limited to medical issues, family emergencies, unexpected challenges, and sourcing basic needs such as food and shelter. More

5

information on the resources related to basic needs can be found at basicneeds.uiowa.edu/resources/. Students are encouraged to contact Student Care & Assistance in the Office of the Dean of Students (Room 135 IMU, dos-assistance@uiowa.edu, or 319-335-1162) for support and assistance with resources.

Accommodations for Students with Disabilities: The University is committed to providing an educational experience that is accessible to all. If a student has a diagnosed disability or other disabling condition that may impact the student’s ability to complete the course requirements as stated in the syllabus, the student may seek accommodations through Student Disability Services (SDS). SDS is responsible for making Letters of Accommodation (LOA) available. The student must provide an LOA to the instructor as

early in the semester as possible, but requests not made at least two weeks prior to the scheduled activity for which an accommodation is sought may not be accommodated. The LOA will specify what reasonable course accommodations the student is eligible for and those the instructor should provide. Additional information can be found on the SDS website.

Classroom Expectations

Free Speech and Expression

Non-discrimination

Absences for Religious Holy Days

Sexual Harassment/Misconduct and Supportive Measures

Course Summary:

Date	Details	Due
------	---------	-----
