



SYLLABUS

MCB 325 Fall 2021

Tuesdays and Thursdays 9:30 AM-10:45 AM, Biosciences East Room 100

Instructor Information

<p>Lisa Rezende, Ph.D. Associate Professor of Practice Molecular & Cellular Biology</p>	
<p>Office: Life Sciences South Room 252 Office Hours (LSS 252 or via Zoom): Wednesdays 10 AM – 11 AM & Thursdays 1 PM – 2 PM or by appointment</p>	<p>Email: lrezende@email.arizona.edu Phone: (520) 621-9729 Greeting: Dr. Rezende (she/her)</p>

Teaching Assistants and Learning Assistants

Teaching Assistants	Office Hour and Location	Contact Information
Alexander Blythe (he/him)	Fridays 11 AM – 1 PM Life Sciences South 2 nd Floor lobby	Phone: 520-400-3802
Arianna Williams	Mondays 12:30 – 2:30 Life Sciences South 2 nd floor lobby	awilliams50@email.arizona.edu
Katie McGrath	Tuesdays 2 PM – 3 PM Thursdays 2 PM – 3 PM https://arizona.zoom.us/j/82805774334	kmcgrath93@email.arizona.edu
AJ Aguilar (he/him)	Thursdays 11 AM -12 PM https://arizona.zoom.us/j/85634468734 For In-person option: Main Library A115	anthonyaguilar@email.arizona.edu
Caroline Hyland	Wednesdays 8 AM – 9 AM Zoom: Zoom Meeting ID: 886 7889 4437	cchyland@email.arizona.edu jareddrhodes@email.arizona.edu

Jared Rhodes (he/him)	Wednesdays 1 PM – 2 PM	
Jennifer Lux	Tuesdays 3:30 – 4:30 https://arizona.zoom.us/j/84972706999	jenniferlux@email.arizona.edu
Sabrina Hirschhorn (she/her)	Fridays 10 AM -11 AM Main Library A114 Zoom: https://arizona.zoom.us/j/89223692600	sabrinahirshorn@email.arizona.edu
Skylar Batty (she/her)	Mondays 2 PM – 3 PM Zoom Meeting ID: 841 5342 9034	skylarbatty@email.arizona.edu

Course Description

This course is designed to help intermediate students understand the biology of cancer. The course will cover the disease of cancer from the aspects of molecular and cellular biology, as well as experimental models of cancer and drug development. Clinical aspects will be highlighted, including diagnosis, pathology, and treatments, as well as ethics.

Course Delivery

This course is scheduled to be taught in the IN-PERSON modality. All materials will be available online for students who cannot attend due to health concerns. Exams will be delivered in-person. If you have concerns about the course modality, please contact Dr. Rezende (lrezende@arizona.edu).

Class Meetings

This class meets **9:30 AM-10:45 AM, Biosciences East Room 100**

Course Prerequisites

MCB 181R and MCB 181L or equivalent Introductory Biology course.

Course Objectives and Expected Outcomes

In this course, you will:

- Apply basic biology concepts to cancer.
- Solve problems in cancer biology.
- Read scholarly literature in cancer biology.
- Discuss ethical issues around cancer research and treatment.

Upon successful completion of the MCB 325, you will be able to:	Which aligns with the Molecular and Cellular Biology* program outcome:
Apply concepts in molecular and cellular biology to cancer.	Demonstrate understanding of the molecular and cellular mechanisms that govern life and apply that understanding to novel scenarios.
Describe the molecular mechanism of various anti-cancer therapies.	Demonstrate understanding of the molecular and cellular mechanisms that govern life and apply that understanding to novel scenarios.
Use experimental evidence to support statements in cancer biology.	Apply analytical thinking to biological problems.
Identify ethical issues that arise in cancer research, diagnosis, and treatment.	Demonstrate ability to analyze the role of biology in societal decisions and to apply ethical decision-making to evaluate existing and new scientific approaches
Discuss current cancer diagnostic methods, treatments, and basic research.	Read and interpret primary scientific literature in cell and molecular biology, linking the results to prior understanding of biological processes. Evaluate the reliability of sources of information about biology.

* Any student who has completed MCB 181R/L may take MCB 325 regardless of major.

Required Materials

Inclusive Access Text

The course textbook and online activities are being delivered digitally via D2L through the Inclusive Access program. The textbook for the course is “Understanding Cancer: from Discovery to Therapy”, by Joyce Schroeder. The cost to students is \$93.53. You will be assigned weekly quizzes based on the reading.

Please access the material through D2L on the first day of class to make sure that there are no issues with delivery so any problems can be addressed quickly. You automatically have access to the course materials FREE through **September 5th, 2021**.

You **must** take action (even if you have not accessed the materials) to opt-out if you do not wish to pay for the materials and choose to source the content independently. **The deadline to opt-out is September 5th. If you do not opt-out and choose to retain your access, the cost of the digital course materials will appear on your Bursars account.**

Please refer to the Inclusive Access FAQs

at <https://shop.arizona.edu/textbooks/Inclusive.asp> for additional information.

Course Website and Electronic Communications Policies

All course materials are available on the course website, <http://www.d2l.arizona.edu>. **To access the class website, you must be enrolled as a student in this section of the course.**

- **You should check the D2L site daily for announcements regarding the class, shown on the class home page.**
- D2L provides a convenient way for us to get in touch with you by email, and I will use email if I need to contact you. **D2L sends email to your “@arizona.edu” address. If you do not check this email account, please forward your UA email to the account you do check regularly.** I will not email you with routine course announcements, but only if there are significant, time-sensitive issues that need to be addressed.
- Please note that it is considered a violation of academic integrity for students to use the email function of D2L for their personal gain. For example, if you have posted your class notes at a third-party site, you may not use D2L email as a way to advertise this to your fellow students. Furthermore, be advised that it is a violation of copyright to distribute course materials in this way.
- The D2L gradebook will be the official list of your scores for all work in the class.
- **It is your responsibility to check your grades frequently to ensure that the scores recorded in D2L are correct.**

Contacting the Instructor

- **Course-related questions should be asked in the Virtual Office in D2L.** Examples of this type of question might include:
 - course logistics such as “When will the week 3 quiz open?” By posting these questions to virtual office the entire class benefits from the question and answer.
 - course content questions such as “Can epigenetic changes lead to loss of heterozygosity?”
- **If you have questions you wish to ask privately** (for example, something about your grade, or if you would like to schedule an office hour), the best way to contact me is email lrezende@arizona.edu
- **I make every effort to respond to all emails within 24 hours during the week, or 48 hours over the weekend.** Please understand that just like you, I have other responsibilities besides this class so my response may not be immediate. **If you have emailed me and haven’t gotten a response within 24 hours on Monday-Friday, please contact me again!**

Grading Scale and Grade Policies

Grades will be based on quizzes, group problem sets, and exams. There will be no curving. A percentage grade scheme will be used with associated the University of Arizona standard letter grade.

Quizzes Weekly D2L quizzes are due before class on Tuesdays and cover the assigned reading for the week. Only your 10 highest quiz scores will be counted towards the final grade will be counted towards the final grade. Quizzes will be worth 10% of the final grade.

Problem Sets Weekly group problem sets are due at the end of class on Thursday. Problem sets will be graded on a 4-point scheme, with 4 signifying excellent, 3 good, 2 acceptable, 1 needs improvement, 0 unacceptable. Only your 10 highest problem set scores will be counted towards the final grade. Problem sets will be worth 20% of the final grade.

In-class Exams Each exam will be graded on a total of 100 points, with exam 1 worth 20% of the final grade, and exams 2 and 3, worth 25% each.

All problem sets and exams are fill-in answers, points will not be given if the answers are not legible.

Summary of grade distribution:

Assignments/examinations	Points	Weight for each (%)	Number	Total weight (%)
Quizzes	4	1	Best 10 out of 12	10
Group Problem Sets	4	2	Best 10 out of 12	20
Exam 1	100	20	1	20
Exam 2	100	25	1	25
Exam 3	100	25	1	25

****Bonus points:** A 0.5% adjustment to towards the final grade will be given for completing the syllabus quiz and a second 0.5% adjustment to towards the final grade will be given for filling a course evaluation.

Standard letter grading scheme:

#	Symbol	Start %
1	E	0
2	D	60
3	C	70
4	B	80
5	A	90

Incompletes and Withdrawals

A grade of Incomplete (I) will only be given at the end of the term in the case of an emergency when a minor portion of the coursework cannot be completed. The student must contact the instructor before the end of the semester to agree on an incomplete grade contract using the Report of an Incomplete forms as described in the [University of Arizona Course Catalog](#).

Requests for withdrawals must be made in accordance with [university policies](#). The last day to drop the course without receiving a grade of W is **September 5th** after this date all students withdrawing from the course will receive a grade of W. The last day to withdraw through UAccess is **October 31st**. After that date, students will need to file a [Late Change Petition](#) to withdraw from the course. Dates are set by the [university calendar](#) and cannot be changed by the instructor

Exam Schedule

All exams will be taken in class during our regular class meeting. If you have exam accommodations through the DRC, [please be sure to place a request for this course](#) so the information is released to me. If you have concerns about coming into to class to take an exam, please contact me.

Exam	Weight on Final Grade	Time to Complete	Date
Exam 1	20%	75 minutes	Thursday, September 23 rd
Exam 2	25%	75 minutes	Thursday, October 28th
Exam 3/Final	25%	120 minutes	Tuesday, December 14 th 8 AM – 10 AM

If you need to miss an exam, please contact Dr. Rezende as soon as you know you will not be there. We will determine a date and time for you to take a proctored make-up exam. As a course policy, make-up exams will only be given for the following reasons:

- Students who have tested positive for CoVID-19 and have been advised to quarantine during the exam period.
- Students who are exhibiting symptoms of CoVID-19 on the day of the exam.
- Absences pre-approved by the UA Dean of Students (or Dean's designee) will be honored, and students will be allowed to reschedule exams if they have a Dean-approved absence.
- Exams that fall on holidays or special events observed by organized religions will be rescheduled for students who show affiliation with that particular religion.
- Unforeseen emergencies.

An important note on exams and academic integrity: I am aware that teaching a large course during a time where students are more likely than usual to miss class or exams due

to CoVID-19 exposure, symptoms, or diagnosis, some students will likely be taking make-up exams. **Discussing any aspects of the exam** including but not limited to topics on the exam, exam format, specific questions, or any other aspect **will be considered a violation of the code of academic conduct for all parties involved in the discussion** (including the person who has already completed the exam), will be reported to the Dean of Students Office and will receive a sanction, such as a failing grade on the assignment, exam, and/or in the course. Students with questions on this policy should refer to the UA Code of Academic Integrity, available at <http://deanofstudents.arizona.edu/policies-and-codes/code-academic-integrity>

Grade Appeals

If you believe that an error has been made in grading, you must contact Dr. Rezende **within one week** after the scores are posted. Turning in a re-grade request does not guarantee that you will receive more points and you may lose points. Your entire assignment or exam will be graded again.

Late Work

Late work will be accepted provided you contact Dr. Rezende as soon as possible and preferably **before** the due date. Assignments that are more than 2 days late will receive a score of 0 **unless previous arrangements have been made with Dr. Rezende**. Problem sets will be turned in online so students who cannot attend class can still turn them in by the due date and time.

Syllabus, Schedule, and Assignment Changes

The information contained in the course syllabus, other than the grade and absence policies, may be subject to change.

Accessibility and Accommodations

At the University of Arizona, we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, <https://drc.arizona.edu/>) to establish reasonable accommodations.

Classroom attendance:

- If you feel sick or may have been in contact with someone who is infectious, stay home. Except for seeking medical care, avoid contact with others and do not travel.
- Notify Dr. Rezende if you will be missing a course meeting or an assignment deadline.
- Non-attendance for any reason does **not** guarantee an automatic extension of due date or rescheduling of examinations/assessments. Please communicate and coordinate any request directly with Dr. Rezende .

- If you must miss the equivalent of more than one week of class, you should contact the Dean of Students Office DOS-deanofstudents@email.arizona.edu to share documentation about the challenges you are facing.
- Voluntary, free, and convenient [COVID-19 testing](#) is available for students on Main Campus.
- If you test positive for COVID-19 and you are participating in on-campus activities, you must report your results to Campus Health. To learn more about the process for reporting a positive test, visit the [Case Notification Protocol](#).
- COVID-19 vaccine is available for all students at [Campus Health](#).

Visit the [UArizona COVID-19](#) page for regular updates.

Statement on compliance with COVID-19 mitigation guidelines: As we enter the Fall semester, your and my health and safety remain the university's highest priority. To protect the health of everyone in this class, students are required to follow the university guidelines on COVID-19 mitigation. Please visit www.covid19.arizona.edu.

Absence and Class Participation Policies

Participating is vital to the learning process. As such, it is critical that students participate in the course activities during the week they are assigned. If you anticipate being absent or are unexpectedly absent, please contact me as soon as possible.

To request a disability-related accommodation to this attendance policy, please contact the Disability Resource Center at (520) 621-3268 or drc-info@email.arizona.edu.

If you are experiencing unexpected barriers to your success in your courses, the Dean of Students Office is a central support resource for all students and may be helpful. The Dean of Students Office is located in the Robert L. Nugent Building, room 100, or call 520-621-7057.

Class Recordings

- Each class will be recorded, and lectures posted on D2L within 24 hours.
- If you have concerns about your name or voice appearing on the recording, please contact Dr. Rezende as soon as possible so we can assure your privacy is maintained.
- Students may not modify content or re-use content for any purpose other than personal educational reasons.
- All recordings are subject to government and university regulations.
- Students accessing unauthorized recordings or using them in a manner inconsistent with [UArizona values](#) and educational policies ([Code of Academic Integrity](#) and the [Student Code of Conduct](#)) are also subject to civil action

Late Assignments Policy

If you are unable to turn in an assignment or complete a quiz on time, please contact Dr. Rezende (irezende@arizona.edu) as soon as possible so we can discuss the situation and develop a plan to help you complete the course successfully.

Syllabus, Schedule, and Assignment Changes

Information contained in the course syllabus, other than the grade and absence policies, may be subject to change.

Course Policies

Code of Conduct

Please review the University's Code of Conduct information, which can be found at: <https://deanofstudents.arizona.edu/policies-codes>

Classroom Behavior

The Arizona Board of Regents' Student Code of Conduct, ABOR Policy 5-308, prohibits threats of physical harm to any member of the University community, including to one's self.

Disruptive Student Behavior

Students are expected to be familiar with the UA Policy on Disruptive Student Behavior in an Instructional Setting found at:

<http://policy.arizona.edu/education-and-student-affairs/disruptive-behavior-instructional-setting>

Threatening Student Behavior

The University of Arizona seeks to promote a safe environment where students and employees may participate in the educational process without compromising their health, safety, or welfare. The Arizona Board of Regents' Student Code of Conduct, ABOR Policy 5-308, prohibits threats of physical harm to any member of the university community, including to one's self. Threatening behavior can harm and disrupt the University, its community, and its families.

Threatening behavior means any statement, communication, conduct or gesture, including those in written form directed towards any member of the university community that causes a reasonable apprehension of physical harm to a person or property. A student can be guilty of threatening behavior even if the person who is the object of the threat does not observe or receive it, so long as a reasonable person would interpret the maker's statement, communication, conduct or gesture as a serious expression of intent to physically harm. You are encouraged to read more on this at: <http://deanofstudents.arizona.edu/accountability/disruptive-student-behavior>

The Policy on Threatening Behavior by Students found at:

<http://policy.web.arizona.edu/education-and-student-affairs/threatening-behavior-students>

Student Code of Academic Integrity

Academic Integrity at the University of Arizona is the principle that stands for honesty and ethical behavior in all homework, tests, and assignments. All students should act with personal integrity and help to create an environment in which all can succeed.

Dishonesty will not be tolerated in this course. This includes, but is not limited to, cheating, plagiarizing, fabricating information, or citations, facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. Students who are found to be dishonest will be reported to the Dean of Students Office and receive a sanction, such as a failing grade on the assignment, exam, and/or in the course. Students with questions on this policy should refer to the UA Code of Academic Integrity, available at:

<http://deanofstudents.arizona.edu/policies-and-codes/code-academic-integrity>

Plagiarism

This course may be using Turnitin, a plagiarism detection software, for some assignments.

The University Libraries have some excellent tips for avoiding plagiarism, available at:

<http://www.library.arizona.edu/help/tutorials/plagiarism/index.html>

Discrimination and Harassment

Policies against discrimination and harassment, along with offices for reporting concerns related to discrimination or harassment, <http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy>

Communication

You are responsible for reading emails sent to your UA account from your professor's UA account and the announcements that are placed on the course D2L site. Information about readings, news events, your grades, assignments, and other course related topics will be communicated to you with these electronic methods. The official policy can be found at: <http://www.registrar.arizona.edu/emailpolicy.htm>

Grievance Policy

Should a student feel he or she has been treated unfairly there are a number of resources available. With few exceptions, students should first attempt to resolve difficulties informally by bringing those concerns directly to the person responsible for the action, or with the student's graduate advisor, Assistant Dean for Student and Alumni Affairs, department head, or the immediate supervisor of the person responsible for the action. If

the problem cannot be resolved informally, the student may file a formal grievance. Information can be found at: <http://deanofstudents.arizona.edu/policies-and-codes/code-academic-integrity>

University Final Grade Appeal Policy

<http://catalog.arizona.edu/2015-16/policies/gradappeal.htm>

Notice of Potentially Objectionable Materials

As this is a biology course, we will be discussing biological evolution in a scientific manner.

Confidentiality of Student Records

Family Educational Rights and Privacy Act of 1974 (FERPA) is the federal law that governs the rights of students and institutional responsibilities with respect to student records. FERPA is a federal law designed to protect the privacy of a student's educational record. More details on what FERPA is about and specifics of what constitutes an Education Record can be accessed at: <http://www.registrar.arizona.edu/ferpa/default.htm> . If you have any questions regarding any of the information provided on this site, please contact the University of Arizona Office of the Registrar via email: reghelp@email.arizona.edu.

University Resources

Academic advising

If you have questions about your academic progress this semester, please reach out to your academic advisor (<https://advising.arizona.edu/advisors/major>). Contact the Advising Resource Center (<https://advising.arizona.edu/>) for all general advising questions and referral assistance. Call 520-626-8667 or email to advising@arizona.edu

Life challenges

If you are experiencing unexpected barriers to your success in your courses, please note the Dean of Students Office is a central support resource for all students and may be helpful. The [Dean of Students Office](#) can be reached at (520) 621-2057 or DOS-deanofstudents@email.arizona.edu.

Physical and mental-health challenges: If you are facing physical or mental health challenges this semester, please note that Campus Health provides quality medical and mental health care. For medical appointments, call (520) 621-9202. For After Hours care, call (520) 570-7898. For the Counseling & Psych Services (CAPS) 24/7 hotline, call (520) 621-3334.

Accessibility and Accommodations

At the University of Arizona, we strive to make learning experiences as accessible as possible. If you anticipate or experience barriers based on disability or pregnancy, please contact the Disability Resource Center (520-621-3268, <https://drc.arizona.edu/>) to establish reasonable accommodations.

Tutoring: UA THINK TANK provides free academic assistance for writing and math, and various other related subjects, at multiple locations and fully online. Students can access free tutoring in-person at the UA Think as well as fully online from the UA Think Tank. To find online tutoring hours, please see <http://thinktank.arizona.edu/tutoring/online>

24/7 Technical Assistance: Technical assistance is available 24 hours a day, with the exception of University observed holidays. 24/7 can help you with troubleshooting hardware, software, and any special course technology you are using. Available by phone, chat, or help ticket.

- Phone: (520) 626-TECH (8324)
- [24/7 Website](#)

University Libraries: The University Libraries provide resources, services, and expertise to the University and the local community. They support online students in particular with access to scholarly articles and journals, free eBooks, interactive tutorials, and helpful research guides. Learn more about these resources and more on their site featuring tools for online students.

[University Libraries for Online and Distance Students](#)