
Developmental Biology
Biology 666 – Spring 2022
Tuesdays and Thursdays, 4:00 PM–5:15 PM
BHS 135

Schedule of Class Topics, Exams, & Research Paper Discussions posted separately

INSTRUCTOR

Dr. Laurel Raftery:

Office: Science and Engineering Building (SEB), Room 3174

Office hours: Tues, Weds: 2:00 – 2:45 PM – in-person, or by Google Meet.

Google Meet invitation will be sent out during first week of class

Tues, Thurs: 5:15 – 5:45 PM – no appointment needed, stay in classroom after class

On occasion, office hours may be cancelled due to instructor's other professional commitments.

Always check for Webcampus announcements.

For Biol 666-specific questions, please ask after class, and we'll make an appointment to discuss more if needed

Telephone: 702-774-1404 (email preferred)

Preferred Contact Method: Email: laurel.raftery@unlv.edu or Webcampus message

Email must come from your UNLVMail or RebelMail address

COURSE DESCRIPTION

Course Overview:

Biol 666 is intended for biological-sciences graduate students who wish to learn about the general processes and mechanisms that occur during development of complex multicellular animals, with an emphasis on model organisms. Students will learn key principles of embryonic development and lifelong tissue renewal, with an emphasis on model invertebrates and vertebrates. Students will build on concepts learned in prerequisite courses, and demonstrate their understanding gained in this course by leading class discussions of original research papers that investigate the processes of gene function and regulation, cell signaling, and tissue interactions during embryonic development and tissue self-renewal.

Biol 666 is an intensive course in which students will be expected to read background material from the textbook, and also to critically read both assigned and independently researched papers from the scientific literature. In order to expand critical thinking skills, students will have separate questionnaires to associated with their assigned research papers, and two midterms to be completed outside of class time. In addition, they will apply the concepts learned to current research areas through a written literature review paper.

Developmental Biology is a 3-credit, 400/600, composite course comprised of advanced undergraduates (enrolled in Biol 466) and beginning graduate students (enrolled in Biol 666). Both sets of students will participate in the class. However, grades will be assigned using two different sets

of criteria so that 466 and 666 students are evaluated using standards appropriate to their academic standing.

Course assignments are designed for students to build skills that they must master to earn an M.S. or Ph.D.

Course Format:

Developmental Biology is a 3-credit, 400/600, composite course that includes advanced undergraduates (enrolled in Biol 466) and beginning graduate students (enrolled in Biol 666). Both sets of students attend the same lectures. However, assignments and exams will be different for the two courses. Grades for each course will be assigned using different criteria so that 466 and 666 students are evaluated using standards appropriate to their academic standing.

Most class meetings will consist of a lecture to introduce the genetics, cells biology, and experimental embryology components that comprise the science of developmental biology. Although the schedule outlines a series of lecture Topics for specific lecture dates, the schedule will undoubtedly slip for various reasons, due to challenges and unpredictable events of the current times.

Four class meetings are dedicated to a guided discussion of a Biol466-assigned research paper, which relates to topics covered in the course. A few remarks about the research paper will be included in the previous lecture. Attendance at these discussion class meetings is optional for Biol666 students. Similarly, Biol666 students are excused from class on the days of Biol466 exams. **Biol 666 students will be assigned additional papers, and a graduate level questionnaire. If there are multiple graduate students in the course, they are encouraged to meet to discuss the research paper prior to completing their responses to the questionnaires independently. "Response assignments" are assessed as an effort-based assignment: there is no right or wrong answer, but students are expected to put effort into understanding the paper in the context of important questions of the time, and the methods available, both for the time and the research organism.**

Learning Outcomes:

Successful completion of this course will advance students' abilities to think logically, read critically, and communicate effectively, as well as to integrate and apply a knowledge base to understand how a fertilized egg develops into a mature animal. Students will practice these skills through their discussion of research papers, their written literature review papers, and in their application of the course concepts to analyze and answer "problem questions" on exams:

- Students will be able to outline and evaluate original research papers for written assignments.
- Students will be able to apply a knowledge base from course material to propose hypotheses based on evidence supplied in exam questions.
- Students will be able to apply the rules of evidence to propose experimental approaches to test a hypothesis.
- Students will be able to apply course concepts to organize and categorize information from the primary literature to write a literature review paper.
- Students will gain practice in one approach for assessing each experiment from a developmental biology research paper, including the logic behind the experiment (such as a question to be answered or model to be tested), the specific question or hypothesis for that experiment, the specific method, the type of data, the number of samples, and how the data were analyzed and interpreted.

In addition to these graduate level outcomes, students who successfully complete this course will demonstrate their understanding of the following major concepts, in their application of these concepts in their answers to questions on the exams and to their discussions of the research papers:

- Students will be able to summarize the stages of a generalized eumetazoan life cycle.
- Students will be able to describe the contributions of sperm and egg to the fertilized zygote.
- Students will be able to outline the cell biological events of egg activation, cleavage divisions, gastrulation, and selected examples of organogenesis, for three or more model organisms discussed in the course.
- Students will be able to summarize and use the cell identity concepts of cell fate specification, commitment, differentiation, and pluripotency, and apply these to analyze specific examples from model organisms.
- Students will be able to describe aspects of metazoan gene structure that are important for differential gene expression, and explain their importance for combinatorial gene regulation.
- Students will be able to describe, and differentiate between, the cell-cell communication concepts of cellular competence, induction, and responses, and apply these to analyze specific examples from model organisms.
- Students will be able to describe regulatory mechanisms that establish asymmetry along the embryo's axes, using examples two or more model organisms.
- Students will be able to describe the contributions of differential gene expression and tissue interactions to the formation of the ectoderm, mesoderm, endoderm, and germline in two or more model organisms.
- Students will be able to describe a parsimonious model for gene duplication and divergence, and apply this concept to the evolutionary conservation for major gene families and gene regulatory networks of eumetazoan development.
- Students will be able to describe the relationship between adult stem cells and a stem cell niche.
- Students will be able to explain the origin of induced pluripotent stem cells and embryonic stem cells, and describe the similarities and differences between them.
- Students will be able to analyze and evaluate the results, arguments, and conclusions of research papers from the developmental biology literature.

Prerequisites:

Required: Admission to a graduate program in the Life Sciences or Biochemistry, or permission of the instructor.

Required Class Materials:

1) Course textbook:

This semester, the instructor will use the 12th edition of the text *Developmental Biology*. The 11th edition of the text is acceptable as an alternative.

***Developmental Biology* 12th Edition by Michael Barresi and Scott Gilbert**

eBook: ISBN-13: 978-1605358239

Hardcover: ISBN-13: 978-1605358222

ISBN-10: 1605358223

This text can be purchased or rented from the UNLV Bookstore or from other online sellers. **If you rent the text, make sure that the date to return is after the UNLV finals week.**

Important: Each new edition of the text has additions, deletions, and rearrangements to the content compared to earlier editions. **The 12th edition page numbers will be incorrect for the 11th edition. Contact Dr. Raftery, when you need 11th edition page numbers.**

Editions 1 through 10 are outdated, and should be avoided.

2) Access to a computer with webcam, and to the internet:

Students who are ill, quarantining, or caring for an ill person, may request a link to attend a specific lecture via Webex. The Webex link is sent to the students' RebelMail address. A link to the lecture MUST be requested before 2pm on the day of the lecture.

3) Login access to UNLV Webcampus/Canvas, and an active RebelMail email address. The instructor will obtain student email addresses from MyUNLV. Please update your information to include your RebelMail address. Course materials will be posted on Webcampus, and assignment/exam scores will be reported there. Some assignments must be completed with a word processing application, and submitted online through Webcampus. Links for Google Meet office hours will be sent by email.

4) Original research articles and other materials downloaded from or linked to the course WebCampus site. If desired, research articles may be accessed through the UNLV library journals collection.

Optional Reading Posted on Webcampus:

Biol666 students will occasionally see "optional Biol666 reading" for the course posted on Webcampus, either as PDFs or links to published review articles that cover additional related material. Graduate students are encouraged to read these articles, for a current view of material covered in the course.

Required Reading Assignments:

- Occasionally, a topic cannot be sufficiently covered in the time available for lectures. In these cases, students will be directed to learn from the textbook, and specific pages of the text will be assigned.
- For 4 class sessions, the student must read the assigned research papers, which will be posted about 2 weeks earlier on WebCampus, and submit written responses that include the students evaluation of specific experiments from the paper.
- Students must independently pursue any supplemental reading that is needed to understand each assigned research paper.
- Students must perform independent literature research and reading in order to write the scholarly literature review paper for the course.

Recommended Textbook References:

- Textbook pages are listed in the schedule for each lecture class. The lecture will include only a fraction of this material. **Students are advised to read the textbook AFTER lecture, so that the large amount of information is manageable.**

Course Materials on WebCampus:

WebCampus is used to post the syllabus, announcements, lecture materials, assigned research papers, and other resource materials. It will also be used to report scores for exams and written assignments. Most materials will be posted within 2 days after they are covered in lecture.

Biol466 review questions for each lecture are posted on Webcampus several days after the lecture. Occasionally, some advance questions are included, and these are labeled “Biol666.” Questions about concepts, or which synthesize information from different parts of the course, are valuable study aids for Biol 666 students.

WebCampus provides a confidential means of communicating with your instructor and for viewing grades. Instructions for login and navigation in UNLV’s Webcampus/Canvas are available [online](#).

Students who need help using WebCampus should call the Student Computing Support Center (702-895-0761).

Four sets of Original Research Papers Assigned to Biol666 students:

For the “Research Discussion” class, the research papers assigned to Biol 666 students will include the same paper as that assigned to Biol466 students. However, for the first two assignments, Biol 666 students will receive two additional, relatively recent research papers, and the Questionnaire will focus on the two recent papers. For the last two assignments, Biol666 students may be assigned one additional research paper or review article. If there are >1 Biol666 students, they are encouraged to arrange a paper discussion meeting amongst themselves, to assist each other in understanding and interpreting the papers. However, the Questionnaire assignments must be completed individually. “Response assignments” are assessed as an effort-based assignment: there is no right or wrong answer, but students are expected to put effort into understanding the paper in the context of important questions of the time, and the methods available, both for the time and the research organism.

Lecture Attendance for Spring 2022:

This is an in-person course. If you are ill or quarantining for other reasons, request a link for remote attendance before 2:00pm for that day's lecture. Biol666 are encouraged to ask any questions they have that are related to the lecture material, either during the class, or immediately after class.

Recording Class Activities:

Students are permitted to make audio or video recordings of lectures for their personal use, and they may share a recording with another member of this semester's class.

The instructor FORBIDS posting recordings online, or making them public in any way. Lectures contain copyrighted material that may be used in a course setting. Students who chose to ignore these restrictions are violating copyright law.

Strategies to Study for This Class:

Graduate students should study to develop an understanding of the major concepts for each lecture topic. Graduate exams will be open book, open notes. Biol666 students who encounter unfamiliar topics may wish to use the Biol466 review questions for that lecture to develop an understanding of the concepts. Biol466 review questions for each lecture are posted on Webcampus several days after the lecture. Occasionally, some advanced questions are included, and these are labeled "Biol666." Questions about concepts, or which synthesize information from different parts of the course, are valuable study aids for Biol 666 students.

Exams will include both essay and experimental design questions that involve synthesis and application of course materials, including application to a novel "scenario." "Scenario" questions are designed to stretch graduate students' abilities to design an experimental approach to learn more about an unknown developmental mechanism.

The literature review assignment is designed to allow students to focus their most intense efforts on an aspect of developmental biology that is relevant to their research topic.

Students are warned that Developmental Biology is an active area of scientific research, and the instructor does not always agree with the textbook authors' interpretation or presentation. Please ask, if you encounter a topic where the text differs from the lecture.

Biol666 Student Syllabus Contract:

Students must complete a copy of the Biol666 Contract Form that is posted with the syllabus, and return to Dr. Raftery through email or in the classroom, by Tuesday February 8.

Grading:

Final grades are based on the combined numerical scores from two midterm exams and one final exam, the outline and final original literature review paper, and the written responses to the Biol666 Questionnaire for the assigned research papers for each Research Paper class day. Scores for each student assessment will be posted on Webcampus, and a written assessment of the Literature Review paper will be available to the student the week after final exams. Only students presenting the proper login information will have access to this information from this secure website.

For the “Research Discussion” class, the research papers assigned to Biol 666 students will include the same paper as that assigned to Biol466 students. Graduate students are encouraged to attend the lecture/discussion class, to offer their perspectives on the research paper that was read by the Biol466 students..

Graduate students in the Life Sciences are held to a higher academic standard than undergraduate students, AND assignments are more challenging. Graduate students should aim to learn new skills, such as application and/or synthesis of information, but also strive to excel. In general, the instructor grades more gently when a student is required to synthesis or apply information in an essay format, and when an assignment asks for a “response” or “opinion”, than when the student is asked to provide short answers to direct questions about course material.

When an early effort receives a poor score, the graduate student should aim to show consistent and significant improvement on later, similar assignments. Students should be aware that a course grade of “C” can endanger their academic standing in the graduate program. Students who wish to know the cut-off scores for Biol666 grades should discuss this with the instructor.

Generally, the instructor is available for consultation about assignments soon after they are posted. Please contact her to arrange appointments at least two weeks before a final due date, so that we can find a time to meet.

Biol666 exams, including the final, are “take-home” exams. Students are given a period of 16 hours to complete a midterm examination, and 24 hours to complete a final exam. Keep in mind that a significant amount of time will be needed to research information for your answers, whether in the text, your class notes, or the online literature. Answers must be your own work, using your own words.

The instructor calculates the course grades using an Excel spreadsheet, and not using the Webcampus Grade Center. Final course grades are posted to MyUNLV approximately 10 days after the final exam.

Spring 2022 Calculation of Biol 666 Course Grade:

A. Assignments Related to the Literature Review Paper	=130 pts (37.1%)
• Topic selection & 5 starting-point reviews or research papers = 5 pts	
• Outline or draft Literature Review Paper + key references = 5 pts	
• Final, fully formatted Literature Review Paper = 120 pts	
B. Responses to Assigned Research Paper Questionnaires = 15 pts ea X 4	= 60 pts (17.1%)
C. Exams	
• Biol666 Midterm Exam 1	= 40 pts (11.4%)
• Biol666 Midterm Exam 2	= 40 pts (11.4%)
• Biol 466 Final Exam	= 80 pts (23 %)
TOTAL	= 350 pts (100%)

Due Date Scheduling:

The instructor strives to work with each Biol666 student, so that assignment due dates do not coincide with other course’s major due dates and presentations. Biol666 students should discuss exam and paper due dates, journal club presentation dates, and colloquium presentation date with the instructor

If a student has a conflict with another course, and wishes to arrange a different due date for the Literature Review Paper, they must contact the instructor no later than September 13.

The COVID-19-positivity rate fluctuates, and a changed situation may affect a student's ability to complete an assignment by the due date. **Biol666 students experiencing an on-going difficulty, must contact the instructor PRIOR to the date an assignment is due, to arrange an alternate date. In the case of an acute illness on the due date, the student must contact the instructor as soon as possible. Once the student is recovered, an alternate due date will be arranged, with consideration to the type of assignment.** If a student is unable to take the final exam on the assigned date, the alternate date will be after the end of the semester, and the student will receive an incomplete in the course.

Midterm Exams:

Each midterm exam will be a "take-home", overnight exam consisting of experimental design questions related to a "scenario, and essay questions that require an understanding of the themes and concepts that relate to the indicated lectures. **Students will have 16 hours to complete the "overnight" midterm exams, but may negotiate the specific 16-hour time period with the instructor.** The exam will be available at the start of the exam period; the student's essay "booklet" will be due by end of the exam period. A PDF document of the completed exam must be emailed to the instructor, to avoid Webcampus upload issues. Points will be deducted for late exam submissions.

Biol666 students must contact the instructor PRIOR to the test start time, if the exam date conflicts with other course assignments, child care, or if the student is ill. Rescheduling a test date due to acute illness on the day of the exam, will be considered on a case-by-case basis, due to the ongoing pandemic.

Final Exam:

The final exam will be similar to the midterm exam, but will cover a broader range of content, and require more synthesis of concepts from multiple parts of the course. Students will complete the exam in one 24 hour period, with start and stop times set by agreement of the student and instructor.

Biol666 students must contact the instructor PRIOR to the test day, if the exam date conflicts with other course assignments, child care, or if the student is ill. A student with a delayed date for the final exam, will be given an Incomplete grade for the course. The instructor will inform the student of their course outcome after the final exam is scored, and submit a grade change request to the SoLS Grad Coordinator. Due to business and personal travel over the winter break, there may be delays in scoring the exam or submitting the grade change.

Written Literature Review:

Each Biol 666 student will be required to write a paper reviewing current research in an area of developmental biology. The rubric for this assignment will be posted with the assignment during the 2nd week of classes. Each student will discuss potential topics with the instructor, and select a developmental biology topic that is not covered in class, and which may be relevant to the student's own research project. The instructor may ask to review the student's literature review paper completed for Biol702, to ensure that a different topic is selected. The student's paper will follow "real life" guidelines for review papers, supplied by a respected developmental biology journal (*Development*), with some changes to make it appropriate for the course. The instructions and rubric for this paper will be supplied to the students by the 4th week of the course. **Students must finalize the topic for their**

paper by Tues February 22, and provide a list of 5 review or original research papers that they will use to start researching the topic.

An outline or first draft, with a near complete set of references, mostly original research papers, is due Weds March 23.

The research paper is due Monday May 2.

The instructor will evaluate the submitted paper according to the representative coverage of the recent (~last 5 years) research literature, synthesis with concepts from the course, evaluation and synthesis of literature discussed, organization and flow, and logical structure.

Biol666 students are strongly encouraged to make an appointment with the UNLV Writing Center as they begin to formulate the organization of their paper: <http://writingcenter.unlv.edu/>

Writing resource centers consider this type of paper a "research paper." **The UNLV Writing Center provides handouts with writing tips. To avoid any question of plagiarism in your own written work, be sure to follow the tips provided by the UNLV Writing Center: [Handouts, including "Avoiding Plagiarism"](#)**

iThenticate Plagiarism Detector:

Past students have discovered that paraphrasing another authors' own words, sentence structure or paragraph flow can lead to unintended consequences. The instructor runs your submitted paper through iThenticate, a plagiarism "detector" provided by the Graduate College. This online resource identifies identical or paraphrased passages, and the related text (online websites or published sources). Students are encouraged to obtain login credentials from the Graduate College, so that they can check their own papers prior to submission, as well as learn to navigate the peculiarities of this resource in preparation for writing a thesis or dissertation.

<https://www.unlv.edu/graduatecollege/ithenticate>

Biol 466 Standards of Academic Integrity:

All exams and individual research paper responses are to be completed individually. Evidence to the contrary will be deemed academic misconduct. Any student caught cheating in an assigned exercise will receive a grade of ZERO for that assignment and an academic misconduct report will be filed with the Office of Student Conduct.

Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the primary sources and/or webpages. Purchase of prepared papers from another through any source is included. Students should be aware that some prepared paper vendors are phishing sites.

The instructor use a stricts definition of plagiarism that includes "close paraphrasing" of another person's writing, or incorporating a quotation without identifying the quoted words with quotation marks (i.e. representing it as part of your own work), even when you cite the original publication.

To avoid any question of plagiarism in your own written work, be sure to follow the tips provided by the UNLV Writing Center: [Handouts, including "Avoiding Plagiarism"](#)

UNLV Policies:

Public Health Directives

Face coverings are currently mandatory for all faculty and students in the classroom. Students must follow all active UNLV public health directives while enrolled in this class. UNLV public health directives are found at [Health Requirements for Returning to Campus](https://www.unlv.edu/coronavirus/health-requirements), <https://www.unlv.edu/coronavirus/health-requirements>. Students who do not comply with these directives may be asked to leave the classroom. Refusal to follow the guidelines may result in further disciplinary action according to the [UNLV Student Conduct Code](https://www.unlv.edu/sites/default/files/page_files/27/StudentConduct-Code.pdf), https://www.unlv.edu/sites/default/files/page_files/27/StudentConduct-Code.pdf, including being administratively withdrawn from the course.

Academic Misconduct

Academic integrity is a legitimate concern for every member of the University community. We all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility, and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy, and are encouraged to always take the ethical path whenever faced with choices. Students enrolling at UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's educational mission. An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another person, from the Internet or any other source without proper citation of the source(s). See the [Student Conduct Code](https://www.unlv.edu/studentconduct/student-conduct), <https://www.unlv.edu/studentconduct/student-conduct>.

Auditing a Course

Auditing a course allows a student to continue attending the lectures and/or laboratories and discussion sessions associated with the course, but the student will not earn a grade for any component of the course. Students who audit a course receive the same educational experience as students taking the course for a grade, but will be excused from exams, assessments, and other evaluative measures that serve the primary purpose of assigning a grade.

Classroom Conduct

Students have a responsibility to conduct themselves in class and in the libraries in ways that do not interfere with the rights of other students to learn, or of instructors to teach. Use of devices such as cellular phones and pagers, or other potentially disruptive activities are only permitted with the prior explicit consent of the instructor. Students are specifically prohibited to record classes without instructor authorization, including online/remote classes (either audio only, or video and audio). The instructor may rescind permission at any time during the class. If a student does not comply with established requirements or obstructs the functioning of the class, the instructor may initiate an administrative withdrawal of the student from the course. Since the COVID-19 pandemic forced some instruction to be delivered remotely starting in Spring 2020, numerous students have asked instructors to record their synchronous classes, so that they can access them at their convenience. Instructors who agree to record their classes (audio only, or video and audio) should inform students in advance. Recorded lectures may not be broadly released to anyone, but made available exclusively to those students enrolled in the class during the particular academic term. Recorded lectures must be stored securely, and are subject to the Nevada System of Higher Education's Records Retention Policy, meaning that the recordings can only be deleted 120 days after the end of class (i.e., after grades are posted). Once this requirement is met, the recordings should be deleted. Class recordings are protected from disclosure, as they are deemed part of an educational record under the Family Educational Rights and Privacy Act (FERPA).

Copyright

The University requires all members of the University Community to familiarize themselves with, and to follow copyright and fair use requirements. You are individually and solely responsible for violations of copyright and fair use laws. The University will neither protect nor defend you, nor assume any responsibility for student or employee violations of fair use laws. Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional [copyright policy information](https://www.unlv.edu/provost/copyright) is available at <https://www.unlv.edu/provost/copyright>.

Disability Resource Center (DRC)

The [UNLV Disability Resource Center](https://www.unlv.edu/drc) (Student Services Complex, SSC-A, Room 143, <https://www.unlv.edu/drc>, telephone 702-895-0866) provides resources for students with disabilities. Students who believe that they may need academic accommodations due to a permanent disability, temporary or permanent medical need, or academic support due to pregnancy are encouraged to contact the DRC as early as possible in the academic term. A Disabilities Specialist will discuss what

options may be available to you. Students who are already registered with the DRC should request their accommodations online each semester, and make an appointment to discuss their accommodations with their instructors.

Final Examinations

The University requires that final exams given at the end of a course occur on the date and at the time specified in the Final Exam schedule. The Final Exam schedule is typically available at the start of the semester, and the classroom locations are available approximately one month before the end of the semester. See the [Final Exam Schedule](https://www.unlv.edu/registrar/calendars), <https://www.unlv.edu/registrar/calendars>.

Identity Verification in Online Courses

All UNLV students must use their Campus-issued ACE ID and password to log in to WebCampus-Canvas.

UNLV students enrolled in online or hybrid courses are expected to read and adhere to the [Student Academic Misconduct Policy](https://www.unlv.edu/studentconduct/misconduct/policy), <https://www.unlv.edu/studentconduct/misconduct/policy>, which states that “acting or attempting to act as a substitute for another, or using or attempting to use a substitute, in any academic evaluation or assignment” is a form of academic misconduct. Intentionally sharing ACE login credentials with another person may be considered an attempt to use a substitute, and could result in investigation and sanctions, as outlined in the Student Academic Misconduct Policy.

UNLV students enrolled in online courses are also expected to read and adhere to the [Acceptable Use of Computing and Information Technology Resources Policy](https://www.it.unlv.edu/policies/acceptable-use-computing-and-information-technology-resources-policy), <https://www.it.unlv.edu/policies/acceptable-use-computing-and-information-technology-resources-policy>, which prohibits sharing university accounts with other persons without authorization.

To the greatest extent possible, all graded assignments and assessments in UNLV online courses should be hosted in WebCampus-Canvas or another UNLV-managed platform that requires ACE login credentials for access.

Incomplete Grades

The grade of “I” (Incomplete) may be granted when a student has satisfactorily completed three-fourths of course work for that semester/session, but cannot complete the last part of the course for reason(s) beyond the student’s control and acceptable to the instructor, and the instructor believes that the student can finish the course without repeating it. For undergraduate courses, the incomplete work must be made up before the end of the following regular semester. Graduate students receiving “I” grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the period indicated, a grade of “F” will be recorded, and the student’s GPA will be adjusted accordingly. Students who are fulfilling an Incomplete grade do not register for the course, but make individual arrangements with the instructor who assigned the “I” grade.

Library Resources

Librarians are available to consult with students on research needs, including developing research topics, finding information, and evaluating sources. To make an appointment with a subject expert for this class, please visit the [Libraries’ Research Consultation](https://guides.library.unlv.edu/appointments/librarian) website, <https://guides.library.unlv.edu/appointments/librarian>. You can also [ask the library staff](https://ask.library.unlv.edu/) questions via chat and text message at <https://ask.library.unlv.edu/>.

Missed Classwork

Any student missing class, quizzes, examinations, or any other class or laboratory work because of observance of religious holidays will be given an opportunity during that semester to make up the missed work. The make-up opportunity will apply to the religious holiday absence only. It is the responsibility of the student to notify the instructor within the first 14 calendar days of the course for Fall and Spring courses (except for modular courses), or within the first 7 calendar days of the course for Summer and modular courses, of their intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit the Missed Classwork policy, under Registration Policies, on the [Academic Policies](https://catalog.unlv.edu/content.php?catoid=32&navoid=8271&hl=) webpage, <https://catalog.unlv.edu/content.php?catoid=32&navoid=8271&hl=>.

In accordance with the policy approved by the Faculty Senate regarding missed class time and assignments, students who represent UNLV in any official extracurricular activity will also have the opportunity to make up assignments, provided that the student submits official written notification to the instructor no less than one week prior to the missed class(es). The spirit and intent of the policy for missed classwork is to offer fair and equitable assessment opportunities to all students, including those representing the University in extracurricular activities. Instructors should consider, for example, that in courses which offer a “Drop one” option for the lowest assignment, quiz, or exam, assigning the student a grade of zero for an excused absence for extracurricular activity is both contrary to the intent of the Faculty Senate’s policy, and an infringement on the student’s right to complete all work for the course.

This policy will not apply in the event that completing the assignment or administering the examination at an alternate time would impose an undue hardship on the instructor or the University that could be reasonably avoided. There should be a good faith effort by both the instructor and the student to agree to a reasonable resolution. When disagreements regarding this policy arise, decisions can be appealed to the Department Chair/School Director, College/School Dean, and/or the Faculty Senate Academic Standards Committee.

For purposes of definition, extracurricular activities may include, but are not limited to academic recruitment activities, competitive intercollegiate athletics, fine arts activities, liberal arts competitions, science and engineering competitions, and any other event or activity sanctioned by a College/School Dean, and/or by the Executive Vice President and Provost.

Rebelmail

Rebelmail is UNLV's official email system for students and by University policy, instructors and staff should only send emails to students' Rebelmail accounts. Rebelmail is one of the primary ways in which students receive official University communications, information about deadlines, major Campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the University. Sending emails within WebCampus-Canvas is also acceptable.

Tutoring and Coaching

The Academic Success Center (ASC), at the Claude I. Howard Building, provides tutoring, academic success coaching, and other academic assistance for all UNLV undergraduate students. For information regarding tutoring subjects, tutoring times, and other ASC programs and services, please visit the [ASC website](https://www.unlv.edu/asc), <https://www.unlv.edu/asc>, or call 702-895-3177. The ASC is located across from the Student Services Complex (SSC). Academic success coaching is located on the second floor of SSC A, Room 254. Drop-in tutoring is located on the second floor of the Lied Library, and on the second floor of the College of Engineering building (TBE A 207).

UNLV Writing Center

One-on-one or small group assistance with writing is available free of charge to UNLV students at the [Writing Center](https://writingcenter.unlv.edu/), <https://writingcenter.unlv.edu/>, located in the Central Desert Complex, Building 3, Room 301 (CDC 3-301). Walk-in consultations are sometimes available, but students with appointments receive priority assistance. Students may make appointments in person or by calling the Center, telephone 702-895-3908. Students are requested to bring to their appointments their Rebel ID Card, a copy of the instructions for their assignment, and two copies of any writing they have completed on their assignment.

Diversity Statement

As an institution of higher learning, UNLV represents a rich diversity of human beings among its faculty, staff, and students, and is committed to aspiring to maintain a Campus environment that values that diversity. Accordingly, the University supports understanding and appreciation of all members of its community, regardless of race, sex, age, color, national origin, ethnicity, creed, religion, disability, sexual orientation, gender, gender identity, marital status, pregnancy, genetic information, veteran status, or political affiliation. Please see [University Statements and Compliance](https://www.unlv.edu/about/statements-compliance) <https://www.unlv.edu/about/statements-compliance>.

A successful learning experience requires mutual respect and trust between the students and the instructor. Accordingly, the instructor asks that students be willing to listen to one another's points of view, acknowledging that there may be disagreements, keep discussion and comments on topic, and use first person, positive language when expressing their perspectives.

UNLV Land Acknowledgement

UNLV is situated on the traditional homelands of Indigenous groups, including the Nuwu or Nuwuvi, Southern Paiute People, descendants of the Tudu, or Desert People. We honor and offer gratitude for those who have stewarded the land; for the land itself; and for the opportunity to cultivate a thriving, diverse, inclusive, and just scholarly community here today that works for a better tomorrow for all.