



BSC4467

Course Syllabus

Instructor

Dr. Xin Wang

Email: wangx3@ufl.edu (<mailto:wangx3@ufl.edu>) (Expect a response within 24 hours on weekdays.)

Office: Microbiology and Cell Science, MCS 1152

Office Hours: 2-3 pm on Friday on [Zoom](https://ufl.zoom.us/j/5714905365?omn=91798363686) [↗](https://ufl.zoom.us/j/5714905365?omn=91798363686) (<https://ufl.zoom.us/j/5714905365?omn=91798363686>) or by appointment

General Course Information

Delivery Method: Online, asynchronous

Credits: 3 credit hours

Prerequisites: MCB 3020 or 3023 (or equivalent)

Course Description and Purpose

Synthetic biology applies basic genetic/metabolic principles to engineer biological cells to attain new functions. Synthetic biology research is a cutting-edge area that marries knowledge from biology, chemistry, physics, and engineering principles. It is still in the infancy of development, yet synthetic biology has already brought breakthroughs in human medicine, industrial and pharmaceutical development, environmental protection, and crop improvement. This course will introduce design principles and applications of biological cells. Topics include synthetic pathway design, artificial photosynthesis, repurposing genetic codons, genome synthesis and editing, and genetic circuit design, among others.

Course Learning Objectives

You will gain fundamental knowledge of synthetic biology and will be able to:

- Clearly describe the construction principle of biological cells.
- Draw out central metabolic pathways by applying redox reaction principles.
- Design synthetic pathways by leveraging new enzymes.
- Clearly describe the principles that control metabolic pathway fluxes.
- Describe in detail key techniques used for genetic codon expansion, genome engineering and editing, and genetic circuit design.
- Critically analyze research literature using course contents and describe research designs in depth.

Course Requirements

Course Materials and Assignments

All required course materials will be available through the [Canvas e-Learning site](http://elearning.ufl.edu/)  (<http://elearning.ufl.edu/>). Instructions for and submission of assignments will also be through Canvas.

Required Textbooks

There is no required textbook. Required reading materials will be posted to Canvas and are listed below.

Materials/Supply Fees

There is no supply fee for this course.

Minimum Technology Requirements

The University of Florida expects students entering an online program to acquire computer hardware and software appropriate to their degree program. Most computers are capable of meeting the following general requirements. A student's computer configuration should include:

- Webcam
- Microphone
- Broadband connection to the internet and related equipment (cable/DSL modem)
- Microsoft Office Suite installed (provided by the university)
- Chrome

Technical and Digital Information Literacy Skills

Minimum Technical Skills

To complete your tasks in this course, you will need a basic understanding of:

- Operating a computer and using word processing software
- Using the Canvas learning management system
- Using email with attachments
- Creating and submitting files in commonly used word processing program formats
- Using presentation programs

Minimum Digital Literacy Skills

Furthermore, you should be able to:

- Use online libraries and databases to locate and gather appropriate information
- Use computer networks to locate and store files or data

- Use online search tools for specific academic purposes, including the ability to use search criteria, keywords, and filters
- Analyze digital information for credibility, currency, and bias (e.g., disinformation, misinformation)
- Properly cite information sources
- Prepare a presentation of research findings

Weekly Course Schedule

Dates (Week)	Topics
Orientation	Introduction to the Course
Module 1	Introduction to Synthetic Biology
Module 2	Principles of Biosynthesis
Module 3	Central Metabolism — Ketoacids
Module 4	Carbon Rearrangement Reactions for Glycolysis Redesign
Module 5	Carbon Rearrangement Reactions and Application
Module 6	Terpenes and Artemisinin Biosynthesis
Module 7	General Principles of Energy Generation in Cells
Module 8	Energetics and Diversity of Electron Transport Chains
Module 9	Photosynthesis
Module 10	Central Dogma
Module 11	Expanding Genetic Codons
Module 12	Genome Synthesis and Recoding
Module 13	Multiplex Automated Genome Engineering (MAGE)
Module 14	Genetic Circuit Design
	Final Exam

Critical Dates and Deadlines

No late submissions will be accepted except for extenuating circumstances.

Module 6: Exam 1

Module 7: Review paper first submission due

Module 7: Semester project: paper selection due

Module 10: Semester project: oral presentation due

Module 11: Review paper final submission due

Module 12: Semester project: questions to peers due

Module 13: Semester project: responses to peers due

Module 15: Final exam

Exam Administration — Honorlock

All exams (midterm and final) will be administered through [Honorlock \(https://ufl.instructure.com/courses/508799/pages/honorlock-instructions\)](https://ufl.instructure.com/courses/508799/pages/honorlock-instructions) using Canvas in e-Learning with students using personal computers. Honorlock is an online proctoring service that allows students to take exams on-demand 24/7. There are no scheduling requirements or fees. The exam may be taken at any location approved by Honorlock during the scheduled exam window on Canvas. Appointments are not needed with Honorlock

You will need a laptop or desktop computer with a webcam, a microphone, and a photo ID. The webcam and microphone can be either integrated or external USB devices.

Honorlock requires that you use the [Google Chrome](https://www.google.com/chrome/)  [\(https://www.google.com/chrome/\)](https://www.google.com/chrome/) browser and that you must add the [Honorlock extension to Chrome](https://app.honorlock.com/install/extension)  [. \(https://app.honorlock.com/install/extension\)](https://app.honorlock.com/install/extension).

For further information, FAQs, and technical support, please visit [Honorlock](http://honorlock.com/students)  [. \(http://honorlock.com/students\)](http://honorlock.com/students).

Evaluation of Learning/Grades

Assignment(s)	Percent of Course Total
Bonus quizzes	Up to 10%
Review paper writing	15%
Midterm exam	25%
Semester project: Research paper presentation	10%
Homeworks and discussions	20%
Final exam	30%

Exams

There will be two exams in the form of short answers. They require critical thinking skills and knowledge from the content learned in lectures.

Discussions, Quizzes, Homework

Bonus Quizzes: There will be non-proctored quizzes for certain lecture modules, worth up to 10% of your total grade. The quiz can be accessed through Module Homework in Canvas. The purpose of the quizzes is for you to refresh your knowledge on certain concepts you have learned in this class or previous classes.

Discussion Groups and Homework: The purpose of the discussion group is to encourage student-student interaction and peer learning. The discussion is on current literature that follows lectures of certain modules. There will also be homework assignments that ask you to answer questions related to the research literature. This will serve as a starting point for discussion that is graded as your participation points. Students are encouraged to ask and answer other related questions in the discussion group. The instructor will monitor the discussion on Canvas.

Presentation: Each student will participate in groups to present a manuscript from the primary literature that was published within the last 5 years. The presentation will be 10-15 minutes in length and must adequately describe the methods and results conveyed in at least three figures from the manuscript or its supplemental data. **You will need to make a video and upload it to Canvas.** Each presentation will be reviewed by two of your peer groups. Grades will be assigned based on the input of your classmates and the view of the instructor.

Review Paper Writing: There are two submissions for a review paper during the semester (regarding microbial metabolism). You will be notified of topics to write about ahead of time through Canvas. This is to gauge your understanding of the class topics and your critical thinking abilities. Detailed instructions for the paper writing can be found on Canvas.

Grading Policy


I will do my best to grade your work **within a week after the assignment's due date**.

Final letter grades will be assigned based on the number of points earned, as follows:




Grade	Percent
A	92-100%
A-	90-91%
B+	88-89%
B	83-87%
B-	80-82%
C+	78-79%
C	73-77%
C-	70-72%
D+	68-69%
D	63-67%
D-	60-62%
F	<60%

See the current [Grades and Grading Policies](https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/)  (<https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>) for more information.


Make-Up Policy

Requirements for class attendance and make-up exams, assignments, and other work are consistent with university [Attendance Policies](https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/)  [\(https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/\)](https://catalog.ufl.edu/UGRD/academic-regulations/attendance-policies/).

Course Evaluation

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available on the [GatorEvals Providing Constructive Feedback webpage](https://gatorevals.aa.ufl.edu/students/)  [\(https://gatorevals.aa.ufl.edu/students/\)](https://gatorevals.aa.ufl.edu/students/). Students will be notified when the evaluation period opens and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via the [GatorEvals website](https://ufl.bluera.com/ufl/)  [\(https://ufl.bluera.com/ufl/\)](https://ufl.bluera.com/ufl/). Summaries of course evaluation results are available to students on the [GatorEvals Public Results webpage](https://gatorevals.aa.ufl.edu/public-results/)  [\(https://gatorevals.aa.ufl.edu/public-results/\)](https://gatorevals.aa.ufl.edu/public-results/).

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the [Disability Resource Center](https://disability.ufl.edu/)  [\(https://disability.ufl.edu/\)](https://disability.ufl.edu/) (352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter that must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Getting Help

Help with Course Material

If you have questions about the course material or your grades, reach out to your instructor.

Technical Difficulties

For help with technical issues or difficulties with Canvas, please contact the UF Computing Help Desk at:

- <http://helpdesk.ufl.edu> ↗ (<http://helpdesk.ufl.edu>)
- 352-392-HELP (4357)
- Walk-in: HUB 132

Any requests for make-ups (assignments, exams, etc.) due to technical issues should be accompanied by the ticket number received from the UF Computing Help Desk when the problem was reported to them. The ticket number will document the time and date of the problem. You should email your instructor within 24 hours of the technical difficulty if you wish to request a make-up.


Mental Health and Well-Being

Field courses introduce many new situations, people, and environments. If you find yourself struggling emotionally, please talk to a staff member about it. We are not mental health professionals, but if it's impacting your participation and performance in class, we can work with you on that.


If you are a UF student, you can contact the [Counseling and Wellness Center](https://counseling.ufl.edu/) ↗ (<https://counseling.ufl.edu/>). They have one-click access to people who can help you connect to the right resources for your situation. If these struggles are significantly impacting your performance in your courses, I encourage you to contact the Dean of Students Care Area to connect with a support team that can help with temporary accommodations, authorization to make up for missing coursework, and medical petitions.

Health and Wellness


- **U Matter, We Care:** If you or someone you know is in distress, please email umatter@ufl.edu, call 352-392-1575, or visit [U Matter We Care](http://umatter.ufl.edu/) ↗ (<http://umatter.ufl.edu/>) to refer or report a concern, and a team member will reach out to the student in distress.
- **Counseling and Wellness Center:** Visit the [UF Counseling & Wellness Center](http://counseling.ufl.edu/) ↗ (<http://counseling.ufl.edu/>) website or call 352-392-1575 for information on crisis services and non-crisis services.
- **Student Health Care Center:** Call 352-392-1161 for 24/7 information to help you find the care you need, or visit the [UF Student Health Care Center](http://shcc.ufl.edu/) ↗ (<http://shcc.ufl.edu/>) website.

- **University Police Department:** Visit the [UF Police Department](http://police.ufl.edu/)  (<http://police.ufl.edu/>) website or call 352-392-1111 (or 9-1-1 for emergencies).
- **UF Health Shands Emergency Room/Trauma Center:** For immediate medical care in Gainesville, call 352-733-0111 or go to the emergency room at 1515 SW Archer Road, Gainesville, FL 32608. Visit the UF Health Shands Emergency Room/Trauma Center website.

Financial Assistance

Scholarships are available from various sources. Many departments offer assistance. UF students with small, immediate emergency needs can get assistance through the [Aid-A-Gator](https://www.sfa.ufl.edu/aidagator/)  (<https://www.sfa.ufl.edu/aidagator/>) program for things outside of academic life.

Resources for UF Online Students

A variety of support resources for UF Online students are consolidated on this page: <https://ufonline.ufl.edu/resources/>  (<https://ufonline.ufl.edu/resources/>)

Academic and Student Support

- **Career Connections Center:** For career assistance and counseling services, visit the [UF Career Connections Center](http://career.ufl.edu/) (<http://career.ufl.edu/>) website or call 352-392-1601.
- **Library Support:** For various ways to receive assistance concerning using the libraries or finding resources, visit the [UF George A. Smathers Libraries Ask-A-Librarian](https://uflib.ufl.edu/find/ask/) (<https://uflib.ufl.edu/find/ask/>) website.
- **Teaching Center:** For general study skills and tutoring, visit the [UF Teaching Center](http://teachingcenter.ufl.edu/) (<http://teachingcenter.ufl.edu/>) website or call 352-392-2010.
- **Writing Studio:** For help with brainstorming, formatting, and writing papers, visit the [University Writing Program Writing Studio](http://writing.ufl.edu/writing-studio/) (<http://writing.ufl.edu/writing-studio/>) website or call 352-846-1138.

Student Data and Privacy


There are federal laws protecting your privacy with regard to grades earned in courses and on individual assignments. For more information, please see the [Notification to Students of FERPA Rights \(https://catalog.ufl.edu/UGRD/academic-regulations/ferpa-confidentiality-student-records/\)](https://catalog.ufl.edu/UGRD/academic-regulations/ferpa-confidentiality-student-records/).

AI Usage Policy

AI as an Educational Enhancement

We encourage the use of artificial intelligence (AI) technologies to both engage with course material and enhance the learning experience. AI tools can provide significant educational benefits by facilitating personalized learning support and expanding access to a vast array of informational resources. Students are permitted and encouraged to utilize AI to explore concepts, answer questions, and deepen their understanding of complex topics covered in this course. Importantly, the goal of integrating AI should not be merely to complete assignments but to genuinely engage with the material and strengthen your problem-solving skills. This approach will foster a deeper and more practical understanding of synthetic biology, enhancing your overall educational journey.


Academic Integrity and AI Detection


While AI is an invaluable resource for learning, it is crucial that all work submitted as part of this course reflects your own understanding and intellectual effort. Submitting AI-generated content as your own, such as essays or direct AI outputs, will be considered plagiarism. To maintain academic integrity, we utilize AI detection tools such as Turnitin to identify AI-generated text. Manual checks by instructors will also be conducted to ensure the authenticity of your work. Engage with AI responsibly, ensuring that your submissions genuinely represent your personal knowledge and critical thinking. For further details on the consequences of plagiarism and academic dishonesty, please refer to the [University of Florida's Student Honor Code and Student Conduct Code](https://policy.ufl.edu/regulation/4-040/)  (https://policy.ufl.edu/regulation/4-040/). Violations may lead to severe penalties, including grade reductions, failing the course, or more serious disciplinary actions under the University's honor code.

Software Use

All faculty, staff, and students of the university are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such

violations are also against university policies and rules, disciplinary action will be taken as appropriate.

Microsoft Office 365: Microsoft Office 365 Software is free for UF students through the [UF Information Technology website](https://it.ufl.edu/services/gatorcloud-microsoft-office-online)  (<https://it.ufl.edu/services/gatorcloud-microsoft-office-online>).

Other Free Software: Other free software is available on the [Software Licensing Services at UF website](http://www.software.ufl.edu)  (<http://www.software.ufl.edu>). To check for availability of the media and technical requirements, contact the UF Computing Help Desk at 352-392-HELP(4357).

Tips for Success

Taking a course online can be a lot of fun! Here are some tips that will help you get the most of this course while taking full advantage of the online format:

- Schedule "class times" for yourself. It is important to do the coursework on time each week. You will receive a reduction in points for work that is turned in late!
- Read ALL of the material contained on this site. There is a lot of helpful information that can save you time and help you meet the objectives of the course.
- Print out the Course Summary located in the Course Syllabus and check things off as you go.
- Take full advantage of the online discussion boards. Ask for help or clarification of the material if you need it.
- Do not wait to ask questions! Waiting to ask a question might cause you to miss a due date.
- Do your work well before the due dates. Sometimes things happen. If your computer goes down when you are trying to submit an assignment, you'll need time to troubleshoot the problem.
- To be extra safe, back up your work to an external hard drive, thumb drive, or through a cloud service.

Netiquette Guide for Online Courses

It is important to recognize that the online classroom is in fact a classroom, and certain behaviors are expected when you communicate with both your peers and your instructors. These guidelines for online behavior and interaction are known as netiquette.

Remember that your password is the only thing protecting you from pranks or more serious harm.

- Don't share your password with anyone.
- Change your password if you think someone else might know it.
- Always log out when you are finished using the system.

When communicating online:

- Treat the instructor with respect, even via email or in any other online communication.
- Use your professors' proper title (Dr. or Prof., or if you are unsure, Mr. or Ms.), unless specifically invited to use a first name.
- Use clear and concise language.
- Remember that all college-level communication should have correct spelling and grammar.
- Avoid slang terms such as "wassup?" and texting abbreviations such as "u" instead of "you" on Canvas. The Discord server is more casual.
- Use standard fonts and font sizes (12 pt. is usually good).
- Avoid using the caps lock feature, AS IT CAN BE INTERPRETED AS YELLING.
- Be careful with personal information (both yours and others).
- Do not send confidential information via email.

When you send an email to your instructor, teaching assistant, or classmates:

- Use a descriptive subject line.
- Be brief.
- Avoid attachments unless you are sure your recipients can open them.
- Avoid HTML in favor of plain text.
- Sign your message with your name and class name (some instructors teach multiple courses at one time).

- Think before you send the email to more than one person. Does everyone really need to see your message?
- Be sure that the message author intended for the information to be passed along before you click the “Forward” button.

When attending a Zoom class or meeting:

- Do not share your Zoom classroom link or password with others.
- Make sure the background is not distracting or something you would not want your classmates to see.
 - When in doubt, use a virtual background. If you choose to use one, you should test the background out first to make sure your device can support it.
 - Your background can express your personality, but be sure to avoid using backgrounds that may contain offensive images and language.
- Mute is your friend, especially when you are in a location that can be noisy. Don't leave your microphone open if you don't have to.
- If you want to speak, you can raise your hand (click the “raise hand” button at the center bottom of your screen) and wait to be called upon

University Honesty Policy

University Policy on Academic Conduct

As a student at the University of Florida, you have committed yourself to uphold the Honor Code, which includes the following pledge: **“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”** You are expected to exhibit behavior consistent with this commitment to the UF academic community, and on all work submitted for credit at the University of Florida, the following pledge is either required or implied: **“On my honor, I have neither given nor received unauthorized aid in doing this assignment.”**

It is assumed that you will complete all work independently in each course unless the instructor provides explicit permission for you to collaborate on course tasks (e.g., assignments, papers, quizzes, exams). Furthermore, as part of your obligation to uphold the Honor Code, you should report any condition that facilitates academic misconduct to appropriate personnel. It is your individual responsibility to know and comply with all university policies and procedures regarding academic integrity and the

Student Honor Code. Violations of the Honor Code at the University of Florida will not be tolerated. Violations will be reported to the Dean of Students Office for consideration of disciplinary action. For more information regarding the Student Honor Code, please see the [Student Honor Code and Student Conduct Code webpage](https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/) (https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/).

Plagiarism

The [Student Honor Code and Student Conduct Code](https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/) (https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/) state that:

"A Student must not represent as the Student's own work all or any portion of the work of another. Plagiarism includes but is not limited to:

- Stealing, misquoting, insufficiently paraphrasing, or patch-writing.
- Self-plagiarism, which is the reuse of the Student's own submitted work, or the simultaneous submission of the Student's own work, without the full and clear acknowledgment and permission of the Faculty to whom it is submitted.
- Submitting materials from any source without proper attribution.
- Submitting a document, assignment, or material that, in whole or in part, is identical or substantially identical to a document or assignment the Student did not author."



Additional Comments Regarding Academic Integrity

Students are encouraged to discuss material from the course with each other, help each other understand concepts, study together, and even discuss assessment questions with each other once the quiz window is closed. However, the following is considered academic dishonesty, and I expect that no student will ever do any of the following:

- Have another person complete a quiz in this course
- Copy another student's quiz in this course
- Collaborate with anyone during a quiz in this course
- Discuss the questions and answers of a quiz with other students while the quiz window is still open
- Manipulate and/or distribute any materials provided in this course for any purpose (including course lecture slides)
- Use any materials provided by a previous student in the course

UF Complaints Policy and Student Complaint Process






The University of Florida and most instructors believe strongly in the ability of students to express concerns regarding their experiences at the University. Most problems, questions, and concerns about courses can be resolved by professionally communicating with the instructor. Please try to meet your instructor in person, make an appointment to call, or try to set up a remote meeting through Zoom or other media.

If this does not help, the university encourages the students who wish to file a written complaint to submit that complaint directly to the department that manages that course. If a problem really persists and cannot be resolved by communicating with the instructor and the department, use the [Complaint Portal](https://ombuds.ufl.edu/complaint-portal/) . View the [Student Complaint Process](http://www.distance.ufl.edu/student-complaint-process)  for online distance learning programs.

This said, professionalism is a two-way street. Unprofessional behavior of students includes, among other things, lack of communication, blaming other people or external factors, lying, affecting others negatively in a group or in the class, not accepting criticism, and not being proactive in solving problems or seeking help. Furthermore, faculty often have family and other obligations to tend to. Over the weekend, replies to your inquiries or questions may be delayed. If a student is repeatedly lacking professionalism, the instructor has the right to file a formal complaint against the student through the Dean of Students office.

Privacy and Accessibility Policies

For information about the privacy policies of the tools used in this course, see the links below: Delete the items that don't apply to your course.

- Adobe
 - [Adobe Privacy Policy](https://www.adobe.com/privacy/policy.html) 
 - [Adobe Accessibility](https://www.adobe.com/accessibility.html) 
- Honorlock
 - [Honorlock Privacy Policy](https://honorlock.com/student-privacy-statement/) 
 - [Honorlock Accessibility](https://honorlock.com/accessibility-statement/) 
- Instructure (Canvas)
 - [Instructure Privacy Policy](https://www.instructure.com/policies/privacy) 

- [Instructure Accessibility](https://www.instructure.com/canvas/accessibility) (<https://www.instructure.com/canvas/accessibility>)
- Microsoft
 - [Microsoft Privacy Policy](https://privacy.microsoft.com/en-us/privacystatement) ↗ (<https://privacy.microsoft.com/en-us/privacystatement>)
 - [Microsoft Accessibility](https://www.microsoft.com/en-us/accessibility/office?activetab=pivot_1%3aprimar2) ↗ (https://www.microsoft.com/en-us/accessibility/office?activetab=pivot_1%3aprimar2)
- Perusall
 - [Perusall Privacy Policy](https://app.perusall.com/legal/privacy) ↗ (<https://app.perusall.com/legal/privacy>)
 - [Perusall Accessibility](https://support.perusall.com/hc/en-us/articles/360033993894) ↗ (<https://support.perusall.com/hc/en-us/articles/360033993894>)
- Harmonize
 - [Harmonize Privacy Policy](https://harmonize.io/privacy-policy/) ↗ (<https://harmonize.io/privacy-policy/>)
 - [Harmonize Accessibility](https://help.harmonizelearning.com/hc/en-us/articles/15800765235213-Accessibility) ↗ (<https://help.harmonizelearning.com/hc/en-us/articles/15800765235213-Accessibility>)
- Sonic Foundry (Mediasite Streaming Video Player)
 - [Sonic Foundry Privacy Policy](https://sonicfoundry.com/privacy-policy/) ↗ (<https://sonicfoundry.com/privacy-policy/>)
 - [Sonic Foundry Accessibility](https://mediasite.com/wp-content/uploads/Mediasite-7-Content-Accessibility.pdf) ↗ (<https://mediasite.com/wp-content/uploads/Mediasite-7-Content-Accessibility.pdf>) (PDF)
- Vimeo
 - [Vimeo Privacy Policy](https://vimeo.com/privacy) ↗ (<https://vimeo.com/privacy>)
 - [Vimeo Accessibility](https://vimeo.com/blog/post/accessibility-updates-to-the-vimeo-player/) ↗ (<https://vimeo.com/blog/post/accessibility-updates-to-the-vimeo-player/>)
- YouTube (Google)
 - [YouTube \(Google\) Privacy Policy](https://policies.google.com/privacy) ↗ (<https://policies.google.com/privacy>)
 - [YouTube \(Google\) Accessibility](https://support.google.com/youtube/answer/189278?hl=en) ↗ (<https://support.google.com/youtube/answer/189278?hl=en>)
- Zoom
 - [Zoom Privacy Policy](https://zoom.us/privacy) ↗ (<https://zoom.us/privacy>)
 - [Zoom Accessibility](https://zoom.us/accessibility) ↗ (<https://zoom.us/accessibility>)

Disclaimer

This syllabus represents the Instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.
