

## GENERAL STUDIES COURSE PROPOSAL COVER FORM

### Course information:

Copy and paste **current** course information from [Class Search/Course Catalog](#).

College/School	New College of Interdisciplinary Arts and Science: Department/School	<b>School of Mathematical and Natural Sciences</b>
Prefix: <b>LSC</b>	Number: <b>294</b>	Title: <b>Introduction to Marine Biology</b>
		Units: <b>4</b>

**Course description: Introduction to Marine Biology (LSC 294/BIO 145) is a course designed to introduce non-majors to the basic concepts of marine biology, the study of the ocean and the diverse life forms that reside in the diverse habitats found there. The course will also include an extensive discussion on ocean conservation, including threats facing marine life and policy solutions to those threats. Cannot be used for major credit in the Biological Sciences.**

Is this a cross-listed course?	Yes	If yes, please identify course(s):	<b>BIO 145 (seeking permanent course number)</b>
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Is this a shared course?	No	If so, list all academic units offering this course:
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*Note- For courses that are crosslisted and/or shared, a letter of support from the chair/director of each department that offers the course is required for each designation requested. By submitting this letter of support, the chair/director agrees to ensure that all faculty teaching the course are aware of the General Studies designation(s) and will teach the course in a manner that meets the criteria for each approved designation.*

Is this a permanent-numbered course with topics?	No
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If yes, all topics under this permanent-numbered course must be taught in a manner that meets the criteria for the approved designation(s). It is the responsibility of the chair/director to ensure that all faculty teaching the course are aware of the General Studies designation(s) and adhere to the above guidelines.

**Requested designation:** Natural Sciences–SQ

**Mandatory Review:** Yes

*Note- a separate proposal is required for each designation.*

**Eligibility:** Permanent numbered courses **must** have completed the university's review and approval process. For the rules governing approval of omnibus courses, contact [Phyllis.Lucie@asu.edu](mailto:Phyllis.Lucie@asu.edu).

### Submission deadlines dates are as follow:

For Fall 2018 Effective Date: October 1, 2017

For Spring 2019 Effective Date: March 10, 2018

### Area(s) proposed course will serve:

A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

### Checklists for general studies designations:

Complete and attach the appropriate checklist

- [Literacy and Critical Inquiry core courses \(L\)](#)
- [Mathematics core courses \(MA\)](#)
- [Computer/statistics/quantitative applications core courses \(CS\)](#)
- [Humanities, Arts and Design core courses \(HU\)](#)
- [Social-Behavioral Sciences core courses \(SB\)](#)
- [Natural Sciences core courses \(SQ/SG\)](#)
- [Cultural Diversity in the United States courses \(C\)](#)
- [Global Awareness courses \(G\)](#)
- [Historical Awareness courses \(H\)](#)

### A complete proposal should include:

- ☒ Signed course proposal cover form
- ☒ [Criteria checklist](#) for General Studies designation being requested
- ☒ Course catalog description
- ☒ Sample syllabus for the course
- ☒ Copy of table of contents from the textbook and list of required readings/books

**It is respectfully requested that proposals are submitted electronically with all files compiled into one PDF.**

### Contact information:

Name	David Shiffman	E-mail	David.Shiffman@gmail.com	Phone	202-664-6764
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### Department Chair/Director approval: (Required)

Chair/Director name (Typed):	Lara Ferry	Date:	10/22/19
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Chair/Director (Signature):

Lara Ferry

## **Arizona State University Criteria Checklist for**

### **NATURAL SCIENCES [SQ/SG]**

#### **Rationale and Objectives**

Public scientific literacy, critical for sound decisions on scientifically infused issues such as climate change, includes understanding of basic science concepts, such as the fundamental behavior of matter and energy. It also includes the understanding that “science” is not an encyclopedic collection of facts. Rather, it is a process of exploration that embraces curiosity, inquiry, testing, and communication, to reduce uncertainty about nature. Absent understanding of scientific concepts and of the nature of science, science and pseudoscience are difficult to distinguish, and normal scientific disagreements may be misinterpreted as ideological or political disputes. The goal of the natural sciences (SQ/SG) requirement, including the laboratory requirement, is to instill understanding of basic science content and of the nature of science in every ASU graduate.

10/1989

REV: 1/1991, 3/1991, 1/2000, 10/2008, 4/2014

Proposer: Please complete the following sections and attach appropriate documentation.

<b>ASU--[SQ] CRITERIA</b>			
<b>I. - FOR ALL <i>QUANTITATIVE</i> [SQ] NATURAL SCIENCES CORE AREA COURSES, THE FOLLOWING ARE CRITICAL CRITERIA AND MUST BE MET:</b>			
<b>YES</b>	<b>NO</b>		<b>Identify Documentation Submitted</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>A.</b> Course emphasizes the mastery of basic scientific principles and concepts.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>B.</b> Addresses knowledge of scientific method.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>C.</b> Includes coverage of the methods of scientific inquiry that characterize the particular discipline.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>D.</b> Addresses potential for uncertainty in scientific inquiry.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>E.</b> Illustrates the usefulness of mathematics in scientific description and reasoning.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>F.</b> Includes <b>weekly</b> laboratory and/or field sessions that provide hands-on exposure to scientific phenomena and methodology in the discipline, and enhance the learning of course material.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>G.</b> Students submit written reports of laboratory experiments for constructive evaluation by the instructor.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>H.</b> Course is general or introductory in nature, ordinarily at lower-division level; not a course with great depth or specificity.	Syllabus
<b>II. - AT LEAST ONE OF THE FOLLOWING ADDITIONAL CRITERIA MUST BE MET WITHIN THE CONTEXT OF THE COURSE:</b>			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>A.</b> Stresses understanding of the nature of basic scientific issues.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>B.</b> Develops appreciation of the scope and reality of limitations in scientific capabilities.	Syllabus
<input type="checkbox"/>	<input type="checkbox"/>	<b>C.</b> Discusses costs (time, human, financial) and risks of scientific inquiry.	
<b>NOTE: CRITERIA FOR [SG] COURSES BEGIN ON PAGE 4.</b>			

**III. - [SQ] COURSES MUST ALSO MEET THESE ADDITIONAL CRITERIA:**

YES	NO		Identify Documentation Submitted
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>A.</b> Provides a substantial, quantitative introduction to fundamental principles governing behavior of matter and energy, in physical or biological systems.	Syllabus
		<b>B.</b> Includes a college-level treatment of some of the following topics ( <b>check all that apply below</b> ):	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>a.</b> Atomic and molecular structure	Syllabus
<input type="checkbox"/>	<input type="checkbox"/>	<b>b.</b> Electrical processes	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<b>c.</b> Chemical processes	Syllabus
<input type="checkbox"/>	<input type="checkbox"/>	<b>d.</b> Elementary thermodynamics	
<input type="checkbox"/>	<input type="checkbox"/>	<b>e.</b> Electromagnetics	
<input type="checkbox"/>	<input type="checkbox"/>	<b>f.</b> Dynamics and mechanics	
<b>[SQ] REQUIREMENTS CANNOT BE MET BY COURSES:</b>			
<ul style="list-style-type: none"> <li>• Presenting a qualitative survey of a discipline.</li> </ul>			
<ul style="list-style-type: none"> <li>• Focusing on the impact of science on social, economic, or environmental issues.</li> </ul>			
<ul style="list-style-type: none"> <li>• Focusing on a specific or limiting but in-depth theme suitable for upper-division majors.</li> </ul>			

Proposer: Please complete the following section and attach appropriate documentation.

<b>ASU--[SG] CRITERIA</b>			
<b>I. - FOR ALL <i>GENERAL</i> [SG] NATURAL SCIENCES CORE AREA COURSES, THE FOLLOWING ARE CRITICAL CRITERIA AND MUST BE MET:</b>			
<b>YES</b>	<b>NO</b>		<b>Identify Documentation Submitted</b>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Course emphasizes the mastery of basic scientific principles and concepts.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Addresses knowledge of scientific method.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Includes coverage of the methods of scientific inquiry that characterize the particular discipline.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Addresses potential for uncertainty in scientific inquiry.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. Illustrates the usefulness of mathematics in scientific description and reasoning.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	6. Includes <b>weekly</b> laboratory and/or field sessions that provide hands-on exposure to scientific phenomena and methodology in the discipline, and enhance the learning of course material.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. Students submit written reports of laboratory experiments for constructive evaluation by the instructor.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8. Course is general or introductory in nature, ordinarily at lower-division level; not a course with great depth or specificity.	Syllabus
<b>II. - AT LEAST ONE OF THE ADDITIONAL CRITERIA THAT MUST BE MET WITHIN THE CONTEXT OF THE COURSE:</b>			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	A. Stresses understanding of the nature of basic scientific issues.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	B. Develops appreciation of the scope and reality of limitations in scientific capabilities.	Syllabus
<input checked="" type="checkbox"/>	<input type="checkbox"/>	C. Discusses costs (time, human, financial) and risks of scientific inquiry.	Syllabus

[SG] REQUIREMENTS CANNOT BE MET BY COURSES:		
	<ul style="list-style-type: none"><li>• Presenting a qualitative survey of a discipline.</li></ul>	
	<ul style="list-style-type: none"><li>• Focusing on the impact of science on social, economic or environmental issues.</li></ul>	
	<ul style="list-style-type: none"><li>• Focusing on a specific or limiting but in-depth theme suitable for upper-division majors.</li></ul>	

Course Prefix	Number	Title	General Studies Designation
Bio	145	Introduction to Marine Biology	SG/SQ

Explain in detail which student activities correspond to the **specific** designation criteria.  
Please use the following organizer to explain how the criteria are being met.

Criteria ( <b>from</b> checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
1a SQ/ 1SG		
1B SQ/ 2 SG		
1C Sq/3 SG		
1D Sq/3 SG		

**LSC294/BIO145: Introduction to marine biology, taught by Dr. David Shiffman**

**Description of how the course meets specific criteria for which the course is being proposed (SG/SQ)**

Explain in detail which student activities correspond to the **specific** designation criteria. **Please use the following organizer to explain how the criteria are being met.**

<b>Criteria (from checklist)</b>	<b>How course meets spirit</b>	<b>Please provide detailed evidence of how course meets criteria/where in syllabus</b>
SQ1A/SG1 “course emphasizes the mastery of basic scientific principles and concepts”	Marine biology is a field that includes elements of organismal biology, ecology, chemistry, and environmental science, and this introductory course will emphasize masters of key principles from each with a focus on adaptation to life in water	Descriptions of major taxa of marine animals will stress organismal biology (weeks 7-12)  Course introduction will stress chemistry of water and seawater (week 1)  Conservation sections will stress environmental science principles (weeks 13-14)
SQ1B/SG2 “addresses knowledge of scientific method”	When discussing key discoveries in the history of the field, the process of discovery including the scientific method will be stressed	Key discoveries related to the field will be featured every week- sometimes focusing on ecosystems, sometimes on biodiversity, sometimes on conservation.
SQ1C/SG3 “includes covers of the methods of scientific inquiry that characterize the particular discipline”	When discussing key discoveries in the history of the field, methods of inquiry resulting in those discoveries will be stressed	Key discoveries related to the field will be featured every week- sometimes focusing on ecosystems, sometimes on biodiversity, sometimes on conservation.
SQ1D/SG4 “addresses potential for uncertainty in scientific inquiry”	When discussing key discoveries from the field, the process of discovery will stress uncertainty.	Key discoveries related to the field will be featured every week- sometimes focusing on ecosystems, sometimes on biodiversity, sometimes on conservation.
SQ1E/SG5 “illustrates the useful of mathematics in scientific description and reasoning”	The mathematical nature of several key discoveries will be stressed.	Key discoveries related to the field will be featured every week- sometimes focusing on ecosystems, sometimes on biodiversity, sometimes on conservation, ones focusing on

		mathematics will occur especially with respect to chemistry of water (week 1) and environmental science topics (weeks 13-14)
SQ1F/SG6 “includes weekly laboratory sessions that provide hands-on exposure to scientific phenomena and methodology, and enhance the learning of course material”	There are weekly laboratory assignments that take advantage of the online nature of the course- students will perform online simulated labs or be encouraged to explore their own communities	Assignments sections of each week on syllabus
SQ1G/SG7 “students submit written reports of laboratory experiments for constructive evaluation by the instructor”	There are weekly laboratory assignments that take advantage of the online nature of the course- students will perform online simulated labs or be encouraged to explore their own communities	Assignments sections of each week on syllabus
SG1H/ SG8 “course is general or introductory, ordinarily at lower division level; not a course with great depth or specificity”	This is an introductory course	This is an introductory course
SG/SQ IIA “stresses understanding of the nature of basic scientific issues”	The course will be built around first learning basic scientific issues and then explaining them through real world examples, especially with respect to the chemistry of water and environmental science	Throughout, but especially week 1’s overview of the field
SG/SQ IIB “develops appreciation of the scope and reality of limitations in scientific capabilities”	When discussing key discoveries from the field, the process of discovery will stress the scope and reality of limitations	Throughout
SQ/SG IIC “discusses costs (time, human, financial) and risks of scientific inquiry”	When discussing key discoveries from the field, the process of discovery will stress costs and risks through narrative stories of the history of the field and what it was like to make key discoveries	Throughout
SQIIIA “provides a substantial, quantitative introduction to fundamental principles governing behavior of matter and energy in physical or biological systems”	The first week stresses the chemistry of water, organismal biology section stresses adaptations to life in water	Week 1 (chemistry of water), weeks 7-12 (organismal biology)

SQIIIb <sup>a</sup> "Includes a college level treatment of...atomic and molecular structure"	The first week stresses the chemistry of water	Week 1
SQIIIb <sup>c</sup> "includes a college level treatment of...chemical processes"	The first week stresses the chemistry of water, organismal biology components will stress specific adaptations to living in water	Week 1 (chemistry of water), weeks 7-12 (organismal biology)

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## **SYLLABUS: Introduction to Marine Biology (Spring 2020)**

**Instructor:** David Shiffman

**Contact:** dshiffma@asu.edu / 602 543 6050

**Office hours & location:** TBD / CLCC 292

**Course Description:** Introduction to Marine Biology (LSC 294/BIO 145) is a course designed to introduce non-majors to the basic concepts of marine biology, the study of the ocean and the diverse life forms that reside in the diverse habitats found there. The course will also include an extensive discussion on ocean conservation, including threats facing marine life and policy solutions to those threats.

**Course objectives:** at the end of this course, students should be able to:

1. Understand and articulate the principles of marine biology and conservation
2. Compare and contrast different marine and coastal ecosystems
3. Compare and contrast different living things that call these ecosystems home

**Prerequisites:** none

**Participation:** Participation in all activities associated with the class is essential to success in this course. Participation and success in this class requires a functional computer and internet access. Please plan ahead. Reasonable accommodations will be made in cases of religious holidays or other emergency situations. It is the student's responsibility to provide the instructor with documentation of holidays and or emergencies and a plan to cover the missed course material.

**Textbook:** In addition to supplementary readings that will be shared through the course Canvas website, we will use the textbook "Marine Biology: Function, biodiversity, ecology" 5<sup>th</sup> edition, Oxford Press by Levinton.

**Computers and This Course:** All class materials will be posted on the course Canvas website. Students are expected to have an ASURite ID and access the site regularly for information. Computers are available on campus in the West Campus Computing Commons located in the basement of the library. West Campus Computing Commons staff can assist students who do not yet have an ASURite ID.

**Assignments and Grading:** Assessment of learning in this course will be through written assignments and classroom discussion. The following weights will be used to determine a student's final grade:

Midterm Exam: 25%

Final exam: 50%

Quizzes and Assignments: 25%

### **Grading scale:**

97% < A+

93% < A < 97%

90% < A- < 93%

87% < B+ < 90%

83% < B < 87%

80% < B- < 83%

77% < C+ < 80%

70% < C < 77%

60% < D < 69%

E < 60%

**Course schedule (subject to change with notice)**

Week	Topics	Assignments
1	Introduction and course overview	Chapters 1, 2
2	What does it take to survive in the marine environment?	Chapters 5, 6 <i>Quiz 1</i>
3	Marine ecology	Chapter 4 and supplementary readings
4	Ecosystems: Coasts, Mangroves and Estuaries	Chapter 16 and supplementary readings Assignment 1
5	Ecosystems: Coral reefs, seagrass beds, and kelp forests	Chapter 17 and supplementary readings
6	Ecosystems: open ocean, deep sea, and polar seas	Portions of Chapter 10, 18, 19 (these will be posted), and supplementary readings <i>Quiz 2</i>
7	Biodiversity: Plankton	Chapter 8 and supplementary readings Assignment 2
8	Biodiversity: Sponges, cnidarians, worms, mollusks, and arthropods	Chapter 14 and supplementary readings Assignment 3
9	Biodiversity: fishes	Chapter 9 and supplementary readings
10	<i>Midterm exam</i>	
11	Biodiversity: sharks and rays, marine mammals	Chapter 9 and supplementary readings Assignment 4
12	Biodiversity: sea turtles and seabirds	Chapter 9 and supplementary readings <i>Quiz 3</i>
13	Conservation: Climate change and ocean acidification, pollution, invasive species	Chapter 3, Chapter 20, and supplementary materials
14	Conservation: Overfishing and habitat destruction	Chapter 21 and supplementary materials <i>Quiz 4</i>
15	Course wrap up	
16	<i>Final exam</i>	

### **Course/Instructor Evaluation**

The course/instructor evaluation for this course will be conducted online 7-10 days before the last official day of classes of each semester or summer session. Your response(s) to the course/instructor are anonymous and will not be returned to your instructor until after grades have been submitted. The use of a course/instructor evaluation is an important process that allows our college to (1) help faculty improve their instruction, (2) help administrators evaluate instructional quality, (3) ensure high standards of teaching, and (4) ultimately improve instruction and student learning over time. Completion of the evaluation is not required for you to pass this class and will not affect your grade, but your cooperation and participation in this process is critical. About two weeks before the class finishes, watch for an e-mail with **"NCIAS Course/Instructor Evaluation"** in the subject heading. The email will be sent to your official ASU e-mail address.

### **Withdrawals: It is the student's responsibility to be aware of their registration status.**

Students should be aware that non-attendance will **NOT** automatically result in their being dropped from the course. Therefore, if a student does not attend class during the first week or for any extended period of time during the semester, they should not presume that they are no longer registered.

#### **It is the student's responsibility to be aware of their registration status**

***Any withdrawal transaction must be completed by the deadline date in accordance to the appropriate session at the registrar's office. If not, you will still be officially enrolled and you will receive a grade based on your work completed.***

\*As part of a complete session withdrawal a student must withdraw from all classes in a session. Beginning the first day of classes, undergraduate students are required to work with a Student Retention Coordinator to facilitate the withdrawal process. Please refer to <http://students.asu.edu/StudentRetention>

For additional information about ASU's withdrawal policy and the possible consequences of withdrawing from a class, contact Registration Services or your academic counselor.

#### **Students are responsible for their registration status!**

**The Grade of Incomplete:** A grade of incomplete will be awarded only in the event that a documented emergency or illness prevents a student who is doing acceptable work from completing a small percentage of the course requirements at the end of the semester. The guidelines in the current general ASU catalog regarding a grade of incomplete will be strictly followed. **A grade of incomplete will NOT be awarded unless there is documented evidence of extreme personal or immediate family hardship.** Changes in work hours, child-care emergencies, or other similar personal problems will not be approved as reasons for awarding incompletes. The Director of the School of Mathematical and Natural Sciences must approve all incomplete grade requests.

**Assessments:** Please be aware that student scores on exams or other graded work may be used for assessment of program goals of degrees offered by the School of Mathematical and Natural Sciences.

**Reasonable Accommodations for Students with Disabilities:** The Disability Resource Center (DRC) provides information and services to students with any documented disability who are attending ASU West. Individualized program strategies and recommendations are available for each student as well as current information regarding community resources. Students also may have access to specialized equipment and supportive services and should contact the instructor for accommodations that are necessary for course completion.

### **Academic Integrity and Code of Conduct:**

As defined in the ASU Student Academic Integrity Policy: <http://provost.asu.edu/academicintegrity>.

Each student has an obligation to act with honesty and integrity, and to respect the rights of others in carrying out all academic assignments. A student may be found to have violated this obligation and to have engaged in academic dishonesty if during or in connection with any academic evaluation, he or she:

- Engages in any form of academic deceit;
- Refers to materials or sources or employs devices (e.g., audio recorders, crib sheets, calculators, solution manuals, or commercial research services) not authorized by the instructor for use during the academic evaluation;
- Possesses, buys, sells, obtains, or uses, without appropriate authorization, a copy of any materials intended to be used for academic evaluation in advance of its administration;
- Acts as a substitute for another person in any academic evaluation;
- Uses a substitute in any academic evaluation;
- Depends on the aid of others to the extent that the work is not representative of the student's abilities, knowing or having good reason to believe that this aid is not authorized by the instructor;
- Provides inappropriate aid to another person, knowing or having good reason to believe the aid is not authorized by the instructor;
- Engages in plagiarism;
- Permits his or her work to be submitted by another person without the instructor's authorization;
- Attempts to influence or change any academic evaluation or record for reasons having no relevance to class achievement.

Students must not upload to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work.

This course follows the ASU Academic Integrity Policy in the administration of all course examinations and assignments. Violations of the University Academic Integrity policy will not be ignored. Penalties include reduced or no credit for submitted work, a failing grade in the class, a note on your official transcript that shows you were punished for cheating, suspension, expulsion and revocation of already awarded degrees. The university requires that the implementation of any of these penalties for violations of the academic integrity policy be reported to the Dean's office. The Integrity Policy defines the process to be used if the student wishes to appeal this action.

In this course you are expected to follow the *ASU Student Code of Conduct* (<http://students.asu.edu/srr/code>) especially when communicating with your peers, instructors, and teaching assistants. Violations of the student code of conduct may result in withdrawal from the class.

**Absence Policies:** In addition to the instructor's general policy on absences and missed work, excused absences and conditions for making up work include "Accommodation of Religious Practices" (<https://www.asu.edu/aad/manuals/acd/acd304-04.html>) and "Missed Classes Due to University-Sanctioned Activities" (<https://www.asu.edu/aad/manuals/acd/acd304-02.html>). Students must notify their instructors of these absences as early as possible in the semester.

**Missed Work/Exam Make-up Policy:** Due dates for assignments and exam dates are not flexible. Late work will not be accepted, and missed exams cannot be made up, without prior approval of the instructor and without appropriate documentation of a medical or other emergency. The instructor has the right to deduct 10% of the value of the assignment, per day, for any late work or exams that are accepted. The instructor also may add additional provisions to this policy as dictated by course requirements.

**Final Exam Make-up Policy:** The final exam schedule listed in the Schedule of Classes will be strictly followed. Exceptions to the schedule and requests for make-up examinations can be granted only by the director of the School of Mathematical and Natural Sciences for one of the following reasons:

- 1) religious observances
- 2) the student has more than three exams scheduled on the same day
- 3) two finals are scheduled to occur at the same time

Make-up exams will **NOT** be given for reasons of non refundable airline tickets, vacation plans, work schedules, weddings, family reunions, or other such activities. Students should consult the final exam schedule before making end-of-semester travel plans.

If there is a last-minute personal or medical emergency, the student may receive a grade of Incomplete and makeup the final within one calendar month. The student must provide written documentation and be passing the class at the time to receive an Incomplete. A signed "Request for Grade of Incomplete" must be submitted by the student and approved by the student's instructor and the Director of the School of Mathematical and Natural Sciences.

Please be aware that student scores on exams or other graded work may be used for assessment of program goals of degrees offered by the School of Mathematical and Natural Sciences.

***The instructor reserves the right to make changes to this syllabus as needed***

If you find it necessary to leave a note for this instructor, please contact the administrative reception desk of the School of Mathematical and Natural Sciences located at CLCC II 265

**Title IX:**

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>

*As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <https://eooss.asu.edu/counseling>, is available if you wish discuss any concerns confidentially and privately.*

**Recording of Lectures:**

Our aim is to create a learning environment where all feel free to contribute; thus any recording of class sessions is prohibited (with the exception of those who have a DRC-approved accommodation), and no one should post any verbatim accounts of class discussion or say anything that could identify a class member on social media without the express permission of the course instructor.

**Copyright Infringement:** a warning to students that they must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

**Policy against Threatening Behavior:**

In the classroom and out students are required to conduct themselves in a manner that promotes an environment that is safe and conducive to learning and conducting other university-related business. All incidents and allegations of violent or threatening conduct by an ASU student will be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students. Such incidents will be dealt with in accordance with the policies and procedures described in Section 104-02 of the Student Services Manual (<http://www.asu.edu/aad/manuals/ssm/ssm104-02.html>).

**Potentially Offensive Content:**

If you find any of the content of his class offensive, please bring your concerns to the instructor immediately.

**Power Outage:**

In the event of a campus power outage or other event affecting the ability of the University to deliver classes, any decision to cancel classes will be announced using the ASU emergency notification system. For this reason, it is imperative that students register with the ASU emergency notification system at: <https://cfo.asu.edu/emergency-alert>. In cases in which a limited number of buildings are affected, students should check the university website and/or call the School office at (602) 543-6050.

**Emergency Evacuation Plan:**

Students should be aware of the evacuation route posted on the exit door of each classroom. Students who cannot walk down stairs should notify the instructor as early in the course as possible so the instructor can provide information regarding the location of the designated meeting area on each upper floor of the building (marked with a blue sign that states Emergency Evacuation Response Area).