

SOS 101 Course Syllabus

SOS 101: Introduction to Applied Mathematics for the Life and Social Sciences

Class Number: 32752

Credit Hours: 3

Semester & Year: Spring A, 2019 (1/7/19 - 2/26/19)

Prerequisite(s): MAT 117 with C or better or Mathematics Placement Test with a score of 50% or higher or ALEKS score of 61 or higher; Credit is allowed for only AML 100 or SOS 101.

Instructor

Name: Michelle Pulich Stewart

Email: use Canvas email or Michelle.Pulich.Stewart@asu.edu

Office Hours: available by appointment

Syllabus Disclaimer

All syllabi are subject to minor changes to meet the needs of the instructor, school, or class. Every effort will be made to avoid changing the course schedule, but the possibility exists that unforeseen events will make syllabus changes necessary. The instructor reserves the right to make changes to the syllabus as deemed necessary. Students will be notified in a timely manner of any syllabus changes. Please check your ASU email and the Announcements on the course site often.

Course Description

Introduces quantitative techniques as applied to problems in sustainability. Includes challenges like quantifying the impact of human activities on the environment, population dynamics, the spread of infectious diseases and the impact of resource extraction on ecological systems.

Learning Outcomes

As a result of taking this class, you should be able to

- Create graphs in Excel of data.

- Calculate mean, median, mode and variance of data sets.
- Calculate the human impact using the IPAT equation.
- Interpret and calculate probabilities and conditional probability.
- Understand and apply exponential and logistic growth models.
- Implement those growth models in Excel.
- Understand and calculate in Excel predator-prey dynamics and infectious disease models.

Course Delivery and Access

Students will participate in this course through Canvas. Course content will be delivered through video-lectures, discussion boards, supplemental videos and assessments. A textbook is required for this course (see below). Course content and assignments will be accessed online in Canvas, which can be accessed via my.asu.edu ([Links to an external site.](#))[Links to an external site.](#).

Course Textbook and Materials

There is a textbook required for this course which is provided to you as a pdf. Each week's readings consist of articles and videos related to current topics and events. All readings are provided by PDF or link.

Grading Scale

This course will be graded on an A-E plus/minus scale.

Points	%	Grade
970 - 1,000	97 - 100%	A+
930 - 969	93 - 96%	A
900 - 929	90 - 92%	A-
870 - 899	87 - 89%	B+
830 - 869	83 - 86%	B
800 - 829	80 - 82%	B-
770 - 799	77 - 79%	C+
700 - 769	70 - 76%	C
600 - 699	60 - 69%	D
0 - 599	59% or <	E
	-	EN - Failing for Not Participating
	-	XE - Academic Dishonesty

The grade depends on the participation in a number of activities.

Example:

Assessment	% of Grade
Assignments	50%
Midterm	20%
Final Exam	30%
Total	100%

Assignment

Each module there is an assignment that will have to be turned in electronically. Students can start the assignment after they have reached a 90% score in the practice test (which can be taken as many times as you want).

Midterm

There is one midterm covering the first 6 modules of the course material.

Final Exam

The final exam will be held on the last day of the course.

Communicating with the Instructor

This course uses a discussion board called "Community Forum" for general questions about the course. Prior to posting a question, please check the syllabus, announcements, and existing posts. If you do not find an answer, post your question. You are encouraged to respond to the questions of your classmates.

Email questions of a personal nature to your instructor or assigned TA. You can expect a response within 48 hours.

How to write a proper email

Instructors get hundreds of emails a day and will not respond to emails that are not properly crafted. Many students send emails without a subject, without their name, without information which course they are in, without addressing the professor in a proper way or without referring to what part of the course their question is about. Your instructor will automatically delete such emails, so make sure you write a proper email, which has the following structure:

Subject: Question about ...

Dear "Name Instructor",

I am in your SOS 101 course and I have the following question: In Unit Y Assignment Z

sincerely

"Name student"

Submitting Assignments

All time frames used in class follow Arizona Mountain Standard Time (MST). Arizona does not observe daylight saving time (DST) from March through November; therefore, the time in Arizona will not align with other places that are on MST for half the year. Use a [Time Converter \(Links to an external site.\)](#)Links to an external site. to ensure you account for the difference in Time Zones.

All assignments, unless otherwise announced, MUST be submitted to the designated area of Canvas. Do not submit an assignment via email (unless asked to do so).

Late or Missed Assignments Policy

Of course in our fast-paced world, it is important to stay current with our work. Late work is discouraged in this class. Once an online quiz has closed it is not possible to make it up. Exams that are missed cannot be made up. If an assignment is able to be accepted late, there is a 10% score deduction for every day late. Once an assignment is five days late, it can no longer be accepted.

If an unexpected emergency arises that affects your ability to complete work and/or participate in class, please contact me as soon as possible. Remember to keep a copy of anything you write/create in Excel and submit, in case you have to re-submit it.

Notify the instructor **BEFORE** an assignment is due if an urgent situation arises and the assignment will not be submitted on time. Published assignment due dates (Arizona Mountain Standard time) are firm. Late submissions that did not follow this policy will not be graded.

Course Schedule *(subject to change: see syllabus disclaimer)*

The calendar of due dates of assignments, the midterm and final exam can be found in the Calendar option of Canvas, and selecting this course.

In a typical module you study the online material (videos, textbook chapter and quiz questions) first. When you successfully do the practice questions, the assignment is unlocked. The practice questions can be repeated as many times you want but do not count toward the grade. The assignment are open questions and will be graded.

For the midterm and the final exam there is extra time reserved to interact with the instructor. You are invited to make an appointment if you want to go over specific material again.

About the pace and flow of this compressed class session:

For three weeks of our class (Weeks 2, 3, and 7) the material will be more condensed with two modules per each of those weeks. The other four weeks (Week 1, 4, 5 and 6) will have one module per week. Assignments and quizzes will usually be due on Weds/Sunday, depending on the module and week.

Don't hesitate to let me know if you have any questions. You can email me thru Canvas or through regular email at Michelle.Pulich.Stewart@asu.edu

Course Evaluations

Students are expected to complete the course evaluation. Feedback provides valuable information to the instructor and the college and is used to improve student learning. Students are notified when the online evaluation form is available and students can access it through myASU as well. See [Student FAQs \(Links to an external site.\)](#)[Links to an external site.](#) for more information.

Students with Disabilities

ASU's Disability Resource Center (DRC) is the entity that provides services to students with disabilities. If you desire accommodation for this course, [contact the DRC \(Links to an external site.\)](#)[Links to an external site.](#) to establish your eligibility and make sure they can provide you with the services you will need for this course. Students with disabilities must meet the same standards, deadlines, etc. as any other student in the course.

Student Code of Conduct and Academic Integrity

Students have the responsibility to understand and follow ASU's [Student Code of Conduct \(Links to an external site.\)](#)[Links to an external site.](#) and [Academic Integrity Policy \(Links to an external site.\)](#)[Links to an external site.](#) You may face ethical decisions during your time as a student. If you're not sure whether or not something is permitted, it is your responsibility to ask questions or find out by doing more research using the links above. Any violations in this course are subject to sanctions and will be reported to the School of Sustainability and the college or school of your major.

The Office of Student Rights and Responsibilities accepts [incident reports \(Links to an external site.\)Links to an external site.](#) from students, faculty, staff, or other persons who believe that a student or a student organization may have violated the Student Code of Conduct.

Academic Integrity (also known as cheating, copying others' work, or even reusing your own work) falls under the Student Code of Conduct. Possible sanctions for violations include, but are not limited to, appropriate grade penalties, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), suspension, and expulsion.

Beware that some websites promote themselves as tutoring and educational resource sites, but may actually be sites that put you at risk for an academic integrity violation if you are using the services to submit work that is not your own or gain knowledge of what to expect on a quiz or exam.

Important: Students 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 grounds of suspected copyright infringement.

Disruptive Student Behavior

Students are entitled to receive instruction free from interference by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per the [SSM 201-10 Instructor Withdrawal of a Student for Disruptive Classroom Behavior \(Links to an external site.\)Links to an external site.](#) and [SSM 104-02 Handling Disruptive, Threatening, or Violent Individuals on Campus \(Links to an external site.\)Links to an external site.](#) policies.

Appropriate online behavior (also known as netiquette) is defined by the instructor and includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board posts may be deleted by the instructor.

Discrimination, Harassment, and Retaliation

[ACD-401 Prohibition against Discrimination, Harassment, and Retaliation \(Links to an external site.\)Links to an external site.](#), prohibits discrimination, harassment or retaliation on the basis of race, sex, gender identity, age, religion, national origin, disability, sexual orientation, and veteran status. Violations of this policy may result in disciplinary action, including termination of employees or expulsion of students. Contact the Office of Student Rights and Responsibilities at (480) 965-6547, if you feel another student is harassing you based on any of the factors above; contact the Office of Equity and Inclusion at (480) 965-5057 if you feel an ASU employee is harassing you based on any of the factors above.

ASU continues to implement U.S. Department of Education guidance regarding sexual assaults under Title IX 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 on ASU's [Sexual Violence Awareness \(Links to an external site.\)Links to an external site.](#) page.

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 \(Links to an external site.\)Links to an external site.](#) are available if you wish discuss any concerns confidentially and privately.

Add/Drop/Withdrawals Deadline

ASU's [Academic Calendar \(Links to an external site.\)Links to an external site.](#) contains important dates by which you can add or drop this course without penalty called "Last Day to Drop/Add Without College Approval". After this date, if you choose to withdraw from the course, you may do so by the "Course Withdrawal Deadline", but will receive a 'W' on your official transcript. Consult with your advisor and notify your instructor if you have questions about [Drop/Add and Withdrawal \(Links to an external site.\)Links to an external site.](#)

Grade Appeals

Grade disputes must first be addressed by discussing the situation with the instructor. If the dispute is not resolved with the instructor, the student may appeal to the School of Sustainability per the [University Policy for Student Appeal Procedures on Grades \(Links to an external site.\)Links to an external site.](#) See additional instructions for [undergraduate SOS courses \(Links to an external site.\)Links to an external site.](#) and [graduate SOS courses \(Links to an external site.\)Links to an external site.](#) (under Grade Appeal).

Computer Requirements

This course requires a computer with Internet access and the following:

- Web browsers ([Chrome \(Links to an external site.\)Links to an external site.](#), [Internet Explorer \(Links to an external site.\)Links to an external site.](#), [Mozilla Firefox \(Links to](#)

[an external site.](#))[Links to an external site.](#), or [Safari \(Links to an external site.\)Links to an external site.](#))

- [Adobe Acrobat Reader \(Links to an external site.\)Links to an external site.](#) (free) [\(Links to an external site.\)Links to an external site.](#)
- [Adobe Flash Player \(Links to an external site.\)Links to an external site.](#) (free)
- A webcam, microphone, headset/earbuds, and speaker
- Microsoft Office ([Microsoft 365 \(Links to an external site.\)Links to an external site.](#) is free for all currently-enrolled ASU students)
- Reliable broadband internet connection (DSL or cable) to stream video

Note: A smartphone, iPad, Chromebook, etc. will not be sufficient for completing your work in online courses. While you will be able to access course content with mobile devices, you must use a computer for some assessments.

Email and Internet

You must have an active ASU email account and access to the Internet. ASU email is an [official means of communication \(Links to an external site.\)Links to an external site.](#) among students, faculty, and staff. Students are expected to read and act upon email in a timely fashion. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly. All instructor correspondence will be sent to your ASU email account.

Technical Support Contact Information

If you are experiencing technical issues, visit the [My ASU \(Links to an external site.\)Links to an external site.](#) “Service Center” tab for immediate support, to review answers to frequently asked questions, or to submit a request for service.

The number for immediate assistance is 1-855-278-5080 with staff available 24 hours/day, 7 days/week to help direct your call. Also see [ASU’s Contact Us \(Links to an external site.\)Links to an external site.](#) page. Known issues and system outages will be shared on [ASU’s System Health \(Links to an external site.\)Links to an external site.](#) site.

Students also have access to several [computing sites \(Links to an external site.\)Links to an external site.](#).

Power and System Outages

In the event of a power outage or other event affecting the ability of the University to deliver ground and online classes, any decision to cancel classes will be announced using the ASU

emergency notification system for ground campus students. Ground campus students should register with the [ASU LiveSafe \(Links to an external site.\)Links to an external site.](#) mobile app. Additionally, ground campus and online students can learn about power and system outages on the [ASU System Health \(Links to an external site.\)Links to an external site.](#) site.

Additional Information and Resources

- [School of Sustainability \(Links to an external site.\)Links to an external site.](#) – this course is offered through the School of Sustainability at Arizona State University. Questions about the course should first be addressed with the instructor. If necessary, you can also contact the school at (480) 727-6963 or schoolofsustainability@asu.edu.
- [Career Services \(Links to an external site.\)Links to an external site.](#) – offers assistance to students in choosing their major, setting career goals, interviewing and job hunting strategies. Students pursuing a degree program through the School of Sustainability also have access to a [sustainability career advisor \(Links to an external site.\)Links to an external site.](#).
- [Counseling Services](#) – professional counseling and crisis services for students experiencing emotional concerns, problems in adjusting, and other factors that affect their ability to achieve their academic and personal goals. Support is available 24/7 between campus locations and EMPACT's 24-hour ASU-dedicated crisis hotline.
- [Financial Aid and Scholarship Services \(Links to an external site.\)Links to an external site.](#) – offers information and applications for student funding such as grants, loans, scholarships and student employment.
- [GPA Calculator \(Links to an external site.\)Links to an external site.](#) – students can use this calculator to project their GPA.
- [Health Services \(Links to an external site.\)Links to an external site.](#) – provides non-emergency medical health care to all ground campus ASU students regardless of insurance status. Most visits with a physician or nurse practitioner are free of charge, but fees will be incurred for x-rays, lab results, etc.,
- [Libraries \(Links to an external site.\)Links to an external site.](#) - offers 24/7 access to librarians through "Ask a Librarian" online chat and help by librarians in person at the Reference Desk during most hours the libraries are open.
- [ASU Online Students \(Links to an external site.\)Links to an external site.](#) – students pursuing fully online programs have access to success coaches and additional tips for success.
- [Sun Devil Fitness \(Links to an external site.\)Links to an external site.](#) – offers individual and group fitness opportunities, as well as information on nutrition and wellness, and massages. Use of the general facilities (weights, circuit training and cardio machines) are free, other services (yoga classes, massages) are fee-based.
- [Tutoring and Writing Centers \(Links to an external site.\)Links to an external site.](#) – provides students with academic support services such as tutoring, peer advising, computer assisted instruction, writing support, and supplemental instruction
- [Contact Arizona State University \(Links to an external site.\)Links to an external site.](#) – provides frequently asked question resources and contact information for new questions.

