COURSE SYLLABUS

Course Info: Math 301, Section 002C – Introduction to Probability and Statistics

Spring 2020 (2/3 – 4/21 only) Tues/Thurs 3:00 – 5:00 p.m. Room 2827

<u>Instructor:</u> Professor Carrie Tirel <u>Office:</u> Room 2841

E-Mail: <u>tirelc@uwosh.edu</u> <u>Office Phone:</u> (920)832-2638

Office Hours: Mondays & Wednesdays 10:20 – 11:50 a.m.

Tuesdays & Thursdays 1:30 – 2:45 p.m.

or by appointment

Prerequisites: Grade of C or better in Math 171, or equivalent.

Text (Optional): Probability and Statistics for Engineering and the Sciences, by Jay L. Devore, 9th

Edition.

Other Required Materials: WebAssign license (this includes access to an electronic textbook)

Objectives/Expectations: The successful Math 301 student will be able to:

Describe and understand graphical displays of data.

- Describe and understand numerical summaries of data.
- Describe and calculate probabilities using the basic rules.
- Understand and create elaborate probability calculations using trees and Venn diagrams.
- Count elements in sample spaces using permutations and combinations.
- Describe and understand random variables.
- Develop the basic facts for various discrete probability distributions, including the binomial, hypergeometric, and negative binomial distributions.
- Develop the basic facts for various continuous probability distributions, including uniform and the normal distribution.
- Evaluate and understand expectation formulas for the distributions studied.
- Describe expectation formulas for linear combinations of random variables.
- Calculate areas under continuous curves, specifically the normal curve.
- Develop and explain the reasoning behind sampling distributions, including the Central Limit Theorem.
- Calculate and interpret confidence intervals based on a single sample.
- Conduct hypothesis tests and interpret results based on a single sample.

<u>Calculator:</u> You should have a TI-89, Voyage 200, or TI-Nspire (with CAS) graphing calculator. We will not spend much time in class on instruction about your calculator, but I will try to help you out of class if necessary.

<u>Canvas and email:</u> A Canvas site will be maintained for this course and will be utilized, along with email, as a means of instructor-student communication. To access it, go to <u>canvas.uwosh.edu</u> and log in with your NetID and password. You are expected to check your university email account and Canvas daily.

Course Work: These are the types of course activities planned for the semester:

Online and Written Homework: You will be responsible for regular homework assignments on WebAssign. These will be accessed through Canvas.

In addition, a handful of problems will be assigned periodically to be neatly written up and handed in at the beginning of class on the indicated due date. Your solutions to these problems will be graded on their neatness, accuracy, and mathematical completeness.

Labs: There will be approximately one Excel lab per chapter to complete on WebAssign. Along with this, you will be asked to write a reflection.

Exams: You will be given three in-class exams throughout the semester, the third of which will include a cumulative portion. Here are the **tentative** dates for those exams:

February 27

March 19

April 16

Make-up and Late Work Policy: I will grant you one 2-day extension on a written homework set during the semester--use it wisely! This extension must be requested via email in advance of the due date in order to be used. Other or additional late written homework sets will be accepted up to two calendar days late, with a 15% penalty for each day it is late. I will not accept a written homework set more than two days after the due date.

WebAssign assignments have an automatic extension feature, which grants 2 additional days to complete your work, with a 20% deduction, as long as you request the extension within 2 days of the original due date. This should provide sufficient flexibility for the completion of this work.

In the event that an emergency prevents you from attending an exam, you must 1) contact me (via email or office phone) **before the exam is to take place**, 2) provide adequate proof of your inability to attend, and 3) reschedule **as soon as possible**.

Grading Policy: Your final grade will be taken out of 600 possible points, broken into the following components:

Three in-class exams – 150 points each Homework (Online and Handed In) – 100 points Labs – 50 points

<u>Grading Scale:</u> 93 90 87 83 80 77 73 70 67 63 60 59↓ A A- B+ B B- C+ C C- D+ D D- F

<u>Classroom Etiquette:</u> In order to foster an environment conducive to your own learning and that of others, cell phones, laptop computers, and music players must be turned off and **put away** during class. **Cell phone calculators may not be used on exams.**

<u>Attendance:</u> Attending class regularly is in your own best interest. Although I will not formally take attendance, you are responsible for all homework, quizzes, and exams, whether or not you are in class when they are announced and/or modified.

<u>Academic Misconduct:</u> All suspected incidents of academic misconduct will be handled using the UW System rules, Chapter 14 (from UWS 14.03). The definition of "academic misconduct" can

be found in UWS 14.03. UWS 14 is available to all students in the library; additionally, all students received a copy of this policy during their orientation.

<u>Accommodations:</u> The University of Wisconsin Oshkosh supports the right of all enrolled students to a full and equal educational opportunity. It is the University's policy to provide reasonable accommodations to students who have documented disabilities that may affect their ability to participate in course activities or to meet course requirements.

Students are expected to inform Instructors of the need for accommodations as soon as possible by presenting an Accommodation Plan from either the Accessibility Center, Project Success, or both. Reasonable accommodations for students with disabilities is a shared Instructor and student responsibility.

If you are a student with a disability and have an Accommodation Plan, please let me know as soon as possible.

If you have a learning or any other disability that may warrant an accommodation and do not yet have one, please contact Jeri Kukurich (kukurichje@uwosh.edu) in the Solution Center. She can help arrange testing if you are not sure if you have a learning disability or if you do not have documentation. You can find more information at this link:

https://www.uwosh.edu/deanofstudents/Accessibility-Center/student-resources.

In fairness to other students, I cannot provide accommodations without the proper paperwork, but please let me know if you are in the process of obtaining accommodations.

<u>Disclosure Statement:</u> Students are advised to see the following URL for disclosures about essential consumer protection items required by the Students Right to Know Act of 1990: https://uwosh.edu/financialaid/consumer-information/.

As your instructor, I reserve the right to make changes to this syllabus and the course/homework/exam schedule based on the learning pace of the class, and/or other unanticipated circumstances. I will communicate any changes to you as soon as they are made.