Department of Mathematics and Statistics  
Math 1342.503—Introduction to Probability and Statistics (Online)  
Summer II 2021

Instructor: Mrs. Sullivan    Email: SullivanRK@sfasu.edu    Class Times & Place: This class is completely online

Office Hours (all through Zoom):
Office hours will be posted at the start of each week in the D2L newsfeed
Use the following link to Zoom in for office hours: https://sfasu.zoom.us/my/sullivanrk
Passcode: 1342    Meeting ID: 526 704 8894

Course Description: Probability, random variables, mean and variance, binomial distribution, normal distribution, statistical inference and linear regression.

Text and Materials: Discovering Statistics (Bundle) by Hawkes and Marsh, 3rd Edition.
Online access to the Hawkes Learning System is required. You can gain access by either using the access code from the bundle or by purchasing access from Hawkes. You will also need a scientific calculator. I will be using the TI-30XS MultiView. A graphing calculator is permitted but not required. Please make sure that you are comfortable with the calculator that you select.

Attendance Policy
This is an online class. You are responsible for all due dates and material. Please use the calendar located at the end of the syllabus to help you stay on track. A summer course is fast paced and you have to make sure that you do not fall behind.

Grading Policy:
- 25% Hawkes Lessons [CO: 1,2,3]
- 15% WebTest 1 [CO: 1,2,3]
- 15% WebTest 2 [CO: 1,2,3]
- 20% Midterm Exam [CO: 1,2,3]
- 25% Comprehensive Final Exam [CO: 1,2,3]

Grading Scale:
- 90% - 100%: A
- 80% - 90%: B
- 70% - 80%: C
- 60% - 70%: D
- Below 60%: F

Course Requirements
- Hawkes Lessons—The lesson schedule is located at the end of the syllabus. [CO 1, 2, 3]
- Two WebTests—The WebTests are designed to make sure that you are keeping up with the material. These are online tests through Hawkes. Additional information about the WebTests can be found later in the syllabus. [CO 1, 2, 3]
- Midterm Exam—The midterm exam is an online exam through Hawkes. [CO 1, 2, 3]
- Comprehensive Final Exam—The final exam is an online exam through Hawkes [CO 1, 2, 3]
- Student Responsibility—It is your responsibility to keep up with all due dates and exam dates. It is your responsibility to check Hawkes and d2l daily.

Exam Calendar and Information:

<table>
<thead>
<tr>
<th>Exam</th>
<th>Due Date</th>
<th>Exam Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebTest 1</td>
<td>July 8th</td>
<td>All material covered from 1.1 through 4.3 (see schedule for a detailed list of sections)</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>July 19th</td>
<td>All material covered from 1.1 through 8.2 (see schedule for a detailed list of sections)</td>
</tr>
<tr>
<td>WebTest 2</td>
<td>August 4th</td>
<td>All material covered from 8.3-11.4b (see schedule for a detailed list of sections)</td>
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</tbody>
</table>
| Final Exam      | August 6th| All material covered in the course  
The final exam is comprehensive (see schedule for a detailed list of sections) |

AARC Tutoring: The AARC (Academic Assistance and Resource Center) in the Steen Library has free help available! The AARC is also available through Zoom. Please go to the following website to get up to date information about getting help through the AARC: http://www.sfasu.edu/aarc/tutoring
Hawkes Learning System Lessons:

The Hawkes lessons are how you will learn and gain confidence in the material for this course. These lessons play the role of lecture and homework in a face-to-face class. There are 26 total lessons to complete on Hawkes. Your two lowest Hawkes lessons will be dropped. Each time you work through a lesson, you will work through the lesson in three parts: learn, practice, certify.

1. Part 1: Learn
The first part of the Hawkes lesson plays the role of the lecture that you would have in a face-to-face course. This part will introduce you to the material covered in that sections. You will see examples completed step by step.

2. Part 2: Practice
The second part of the lesson allows you to practice with what you just learned. This part allows you to gain confidence in the new material.

3. Part 3: Certify
The final part is where you get your grade for the lesson. You must certify each lesson in order to get a grade. Once you certify each lesson, your grade for that lesson is 100%. You will see a required mastery for each lesson. This tells you how many questions you need to get correct in order to master the lesson. Once you have mastered the lesson, it is certified and your grade for that lesson is 100%. For example, if it says that the required mastery is 10 out of 13 then once you get 10 questions right, you have certified the lesson.

Note: You can go through any of the three parts as many times as you want

Due dates are posted on the schedule at the end of the syllabus as well as on the Hawkes Learning System. On the scheduled due date, the assignment is due at 11:59 pm.

Late Penalty Policy for Hawkes Lessons

0% penalty for a lesson that is certified one day late*
0% penalty for a lesson that is certified two days late*
25% penalty for a lesson that is certified three days late (The highest grade that can be earned is now a 75% score)
50% penalty for a lesson that is certified four days late
100% penalty for a lesson that is certified more than four days late

*The 0% penalty for a lesson certified up to two days late is in place to allow you to fit the course better into your schedule and allow you that extra day or two when emergencies happen. All lessons must be completed by August 6th. You always want to stay on track with the due dates and only rely on the late submission penalty policy in an emergency situation. This late penalty policy is for Hawkes lessons only.

You need to figure out blocks of time throughout the week that you plan to work on the lessons. Do NOT wait until the due date to try and complete the lessons due that day. Any Hawkes work done after August 6th will not count. You need to pace yourself in order to successfully complete the lessons for that week. You should always try to stay at least a lesson ahead of schedule. One lesson might take you longer than another one.

Miscellaneous:

- It is your responsibility to keep up with all due dates for the course. It takes dedication and time management to succeed in an online course.
- It is your responsibility to check D2L (https://d2l.sfasu.edu/) and Hawkes on a daily basis. You are responsible for anything posted on D2L or on Hawkes.
- I like to use D2L for storage and communication. I will store course files on D2L like the syllabus, formula sheet, and tables. I put announcements on the D2L newsfeed. You will spend most of your time in this course on the Hawkes Learning System.
- Email is the easiest way to get in touch with me. My email address is SullivanRK@sfasu.edu
The following is an excerpt from SFA Policy 5.4:

The federal definition of a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates:

1. Not less than one hour of classroom or direct faculty instruction and a minimum of two hours out-of-class student work each week for approximately fifteen weeks for one semester or trimester hour of credit, or 10 to 12 weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time, or;

2. At least an equivalent amount of work as outlined in item 1 above for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

To this end, all students in courses offered by the Department of Mathematics and Statistics that wish to be successful should plan to spend a minimum of two hours outside of class for every credit hour associated with this course. Expected activities to be completed in the time outside of class include reviewing notes from previous class meetings, reading assigned course resources, completing all assigned exercises and projects, and performing periodic assessment preparation.

See [http://www2.sfasu.edu/math/docs/syllabi/MTH220Syllabus.pdf](http://www2.sfasu.edu/math/docs/syllabi/MTH220Syllabus.pdf) for elements common to all sections.
Exam Dates and Information
Summer II 2021

- **WebTest 1:**
  - WebTest 1 is to be completed online through Hawkes
  - WebTest 1 covers our lessons in chapters 1 through 4 (see schedule on next page)
  - WebTest 1 is due July 8th by 11:59 pm
  - Once you have finished the lessons on WebTest 1, you will want to do the following:
    - Review the lessons
    - Complete the practice for WebTest 1 on Hawkes (under the test tab)
    - Complete WebTest 1
  - You have one attempt at WebTest 1
  - You have 120 minutes to complete WebTest 1 once you start it
  - You will receive your score on this WebTest immediately after it is submitted. You will then be allowed to review the WebTest starting July 12th.

- **Midterm Exam:**
  - The midterm exam is to be completed online through Hawkes
  - The midterm covers all lessons covered so far this semester through 8.2 (see schedule). Once you complete the lessons covered on the midterm, you will want to take the practice midterm located under WebTests on Hawkes.
  - The midterm exam is due July 19th by 11:59 pm
  - You have one attempt on the midterm exam
  - You have 150 minutes to complete the midterm exam once you start it
  - You need to have a copy of the formula packet and tables printed off of D2L.
  - You will receive your score on this midterm immediately after it is submitted. You will then be allowed to review the midterm starting July 21st.

- **WebTest 2:**
  - WebTest 2 is to be completed online through Hawkes
  - WebTest 2 covers all lessons covered from 8.3-11.4b (see schedule on next page)
  - WebTest 2 is due August 4th by 11:59 pm
  - Once you have finished the lessons on WebTest 2, you will want to do the following:
    - Review the lessons
    - Complete the practice for WebTest 2 on Hawkes (under the test tab)
    - Complete WebTest 2
  - You have one attempt at WebTest 2
  - You have 120 minutes to complete WebTest 1 once you start it
  - You will receive your score on this WebTest immediately after it is submitted. You will then be allowed to review the WebTest starting August 5th.
  - You need to have a copy of the formula packet and tables printed off of D2L.

- **Final Exam:**
  - The final exam is to be completed online through Hawkes
  - The final covers all lessons covered in this course (see schedule). There are several practices for the final exam on Hawkes under WebTests.
  - The final exam is due August 6th by 11:59 pm
  - You have 150 minutes to complete the final exam once you start it
  - You have one attempt on the final exam
  - You need to have a copy of the formula packet and tables printed off of D2L.
  - Your final exam score will be released when final grades are posted during the week of August 9th.
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<thead>
<tr>
<th>Lesson Name</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>1.1-1.8 Introduction to Statistical Thinking</td>
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</tr>
<tr>
<td>2.2 Data Classification</td>
<td>6/29</td>
</tr>
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<td>3.1 Frequency Distributions</td>
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<tr>
<td>3.4 Histograms and Other Graphical Displays of Quantitative Data</td>
<td>7/1</td>
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<tr>
<td>4.1 Measures of Location</td>
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<tr>
<td>4.2 Measures of Dispersion</td>
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</tr>
<tr>
<td>4.3 Measures of Relative Position, Box Plots, and Outliers</td>
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<tr>
<td>6.1 Introduction to Probability</td>
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<tr>
<td>7.1 Types of Random Variables</td>
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<tr>
<td>7.2 Discrete Random Variables</td>
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<tr>
<td>7.4 The Binomial Distribution</td>
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<tr>
<td>8.2 The Normal Distribution</td>
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<tr>
<td>8.3 The Standard Normal Distribution</td>
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<tr>
<td>8.4 Applications of the Normal Distribution</td>
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<tr>
<td>9.3 The Distribution of the Sample Mean and the Central Limit Theorem</td>
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<tr>
<td>9.4 The Distribution of the Sample Proportion</td>
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<td>10.2 Interval Estimation of the Population Mean</td>
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<tr>
<td>11.1 Introduction to Hypothesis Testing</td>
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<td>11.2a Testing a Hypothesis about a Population Mean with Sigma Known</td>
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<tr>
<td>11.2b Testing a Hypothesis about a Population Mean with Sigma Unknown</td>
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<tr>
<td>11.2c Testing a Hypothesis about a Population Mean using P-values</td>
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<td>11.4a Testing a Hypothesis about a Population Proportion</td>
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<tr>
<td>11.4b Testing a Hypothesis about a Population Proportion using P-values</td>
<td>8/3</td>
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<tr>
<td>5.1 Scatterplots and Correlation</td>
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<tr>
<td>5.2 Fitting a Linear Model</td>
<td>8/5</td>
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</tbody>
</table>

- Please see previous pages in the syllabus for details on all assignments.
- Most of your semester is spent on Hawkes but I will make announcements on D2L or contact you through email.
- My advice is to always stay at least one lesson ahead of schedule.
**How to Setup Hawkes**

**NEW STUDENTS**
1. Go to [https://learn.hawkeslearning.com](https://learn.hawkeslearning.com)
2. Click Create an Account
3. Choose one of the following:
   - I have an Access Code or License Number
   - I want to Purchase Access

4. Complete the account creation steps.

   **If you selected Temporary Access, to make your account permanent:**

5. Click **Activate**. Note: *you are able to click here, even if your temporary access code has expired.*

6. Using the pop-up window, complete one of the following steps:
   - If you have purchased a license number from the bookstore, type it in and click **Activate Now**.
   - If you need to purchase your materials, click **Purchase Online** to do so with a credit card.

**RETURNING STUDENTS**
1. Sign in to your account at [https://learn.hawkeslearning.com](https://learn.hawkeslearning.com)
2. Locate the product being used in this course on your Dashboard and click **Upgrade**.
   **If you do not see Upgrade on your Dashboard, click Enroll**, select the following for both your instructor and section: **Upgrade to New Edition**, and click **Enroll**. Then select **Upgrade**.

3. Upon selecting **Upgrade**, you will be prompted to enroll into your course. Select your instructor name and section, then click **Enroll**.

4. This will complete the process, and you will see your upgraded access to the new edition courseware on your Dashboard.

**WE CAN HELP**
If you have any questions about your account, please contact Hawkes Technical Support:

**1-800-426-9538**
Monday–Friday, 8:00a.m.–10:00p.m. ET

**Online Chat**
[http://chat.hawkeslearning.com](http://chat.hawkeslearning.com)
24 hours a day, 7 days a week

The course’s official name on Hawkes is Math 1342 Online Summer 2021 - Sullivan