Department of Mathematics and Statistics
Math 1342.501—Introduction to Probability and Statistics (Online)
Summer 2023

Instructor: Mrs. Sullivan  Email: SullivanRK@sfasu.edu  Class Times & Place: This class is completely online
Office Location: Mathematics Building Office #343

Office Hours: Office hours will be posted to the D2L news feed each week. Face-to-face and Zoom options will be available for office hours each week.

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

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 directly from Hawkes. You will also need access to Microsoft Excel. You will be using Excel spreadsheets throughout the semester for your statistical calculations. These spreadsheets are already built and no prior Excel knowledge is needed. SFA provides Excel to all SFA students and you can access Excel through your mySFA account.

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.

Academic Integrity: If there is evidence of or you are suspected of cheating on any assignment, you could earn a zero or be allowed to come and complete an oral examination of the material from that assignment. Any indication of cheating will be reported to the appropriate campus administration.

Grading Policy:

<table>
<thead>
<tr>
<th>Exam</th>
<th>Due Date</th>
<th>Exam Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawkes Lessons [CO: 1,2,3]</td>
<td></td>
<td>25%</td>
</tr>
<tr>
<td>WebTest 1 [CO: 1,2,3]</td>
<td></td>
<td>15%</td>
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<tr>
<td>WebTest 2 [CO: 1,2,3]</td>
<td></td>
<td>15%</td>
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<tr>
<td>Midterm Exam [CO: 1,2,3]</td>
<td></td>
<td>20%</td>
</tr>
</tbody>
</table>
| Comprehensive Final Exam [CO: 1,2,3] | 25% | 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>June 6th</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>June 13th</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>June 28th</td>
<td>All material covered from 8.3-11.4b (see schedule for a detailed list of sections)</td>
</tr>
<tr>
<td>Final Exam</td>
<td>June 30th</td>
<td>All material covered in the course The final exam is comprehensive (see schedule for a detailed list of sections)</td>
</tr>
</tbody>
</table>
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 25 total lessons to complete on Hawkes. 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. The more complicated calculations in the course will be done on Excel. The Excel files along with how to videos are available on D2L. You can click on content on D2L to see the posted files.

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. 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. 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. Any Hawkes work done after June 30th will not count.

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

- See [http://www3.sfasu.edu/math/docs/syllabi/MATH1342Syllabus.pdf] for elements common to all sections.
Exam Dates and Information  
Summer 2023

- **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 opens on June 2nd and is due June 6th 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 June 8th.

- **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 opens on June 9th and is due June 13th by 11:59 pm
  - You have one attempt on the midterm exam
  - You have 120 minutes to complete the midterm exam once you start it
  - You need to have the current Excel file open and ready to use
  - You will receive your score on this midterm immediately after it is submitted. You will then be allowed to review the midterm starting June 15th.

- **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 opens on June 23rd and is due June 28th 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 June 29th.
  - You need to have the current Excel file open and ready to use

- **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 opens on June 28th and is due June 30th by 11:59 pm
  - You have 120 minutes to complete the final exam once you start it
  - You have one attempt on the final exam
  - You need to have the current Excel file open and ready to use
  - Your final exam score will be released when final grades are posted.
<table>
<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>
<td>5/30</td>
</tr>
<tr>
<td>3.1 Frequency Distributions</td>
<td>5/31</td>
</tr>
<tr>
<td>3.4 Histograms and Other Graphical Displays of Quantitative Data</td>
<td>5/31</td>
</tr>
<tr>
<td>4.1 Measures of Location</td>
<td>6/1</td>
</tr>
<tr>
<td>4.2 Measures of Dispersion</td>
<td>6/1</td>
</tr>
<tr>
<td>4.3 Measures of Relative Position, Box Plots, and Outliers</td>
<td>6/2</td>
</tr>
<tr>
<td>6.1 Introduction to Probability</td>
<td>6/7</td>
</tr>
<tr>
<td>7.1 Types of Random Variables</td>
<td>6/7</td>
</tr>
<tr>
<td>7.2 Discrete Random Variables</td>
<td>6/8</td>
</tr>
<tr>
<td>7.4 The Binomial Distribution</td>
<td>6/8</td>
</tr>
<tr>
<td>8.2 The Normal Distribution</td>
<td>6/9</td>
</tr>
<tr>
<td>8.3 The Standard Normal Distribution</td>
<td>6/14</td>
</tr>
<tr>
<td>8.4 Applications of the Normal Distribution</td>
<td>6/14</td>
</tr>
<tr>
<td>9.3 The Distribution of the Sample Mean and the Central Limit Theorem</td>
<td>6/15</td>
</tr>
<tr>
<td>9.4 The Distribution of the Sample Proportion</td>
<td>6/15</td>
</tr>
<tr>
<td>10.2 Interval Estimation of the Population Mean</td>
<td>6/16</td>
</tr>
<tr>
<td>10.3 Estimating the Population Proportion</td>
<td>6/16</td>
</tr>
<tr>
<td>11.1 Introduction to Hypothesis Testing</td>
<td>6/20</td>
</tr>
<tr>
<td>11.2a Testing a Hypothesis about a Population Mean with Sigma Known</td>
<td>6/20</td>
</tr>
<tr>
<td>11.2b Testing a Hypothesis about a Population Mean with Sigma Unknown</td>
<td>6/21</td>
</tr>
<tr>
<td>11.2c Testing a Hypothesis about a Population Mean using P-values</td>
<td>6/22</td>
</tr>
<tr>
<td>11.4a Testing a Hypothesis about a Population Proportion</td>
<td>6/23</td>
</tr>
<tr>
<td>11.4b Testing a Hypothesis about a Population Proportion using P-values</td>
<td>6/26</td>
</tr>
<tr>
<td>5.1 Scatterplots and Correlation</td>
<td>6/29</td>
</tr>
<tr>
<td>5.2 Fitting a Linear Model</td>
<td>6/29</td>
</tr>
</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
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
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
24 hours a day, 7 days a week