<u>SYLLABUS</u>

STATISTICS 1100 SEC. 15-25 **Spring 2018** **MWF 8:00 – 8:50 ROOM: ITE C-80**	**STATISTICS 1100 SEC. 31-40** **Spring 2018** **MWF 9:05 – 9:55 ROOM: SCHEN 151**

Instructor: **Kathleen McLaughlin**

Overview: In this course we will take a critical look at data: how can we organize, analyze and interpret data, how can we use data to make decisions, what role does randomness play in our decision making?   I like to divide the course into 4 major components:

1. **Descriptive Statistics: We begin by taking raw data (univariate and bivariate) and organizing it into useful graphical displays. Next, we summarize the data numerically using measures of central tendency, measures of variation and linear regression.**
2. **Data Collection Designs: We discuss different techniques for collecting data, selecting samples and designing questionnaires. We compare observational studies to randomized experiments and discuss the advantages and disadvantages of each these two methods of data collection.**
3. **Probability: We discuss basic probability theory using tree diagrams and Venn Diagrams. We look at discrete and continuous probability models that are used in statistical analyses.**
4. **Statistical Inference: In this last section, we look at confidence intervals and hypothesis tests for one- and two-sample situations.**

Office Hours: MWF 10:30 - Noon
My office is located in the Austin Building Room 302. This office is located within a suite of Offices. Enter the 3rd floor hallway and then enter the first door on your left. You will see Room 302 which is the first door on your left.

If the above times are not convenient for you, please see me and I can arrange to meet with you at other more convenient times.

E-mail: You can contact me using <u>Kathleen.McLaughlin@uconn.edu</u>.

Your TA will maintain a separate HuskyCT site for your Discussion section. He/she will give you details about that when you meet with him/her. Discussion sections will start on Monday, August 28th.

<u>**COURSE MATERIALS**</u>

TEXTBOOK, CLASS NOTES AND WEB-ASSIGN: This is a bundled package that includes: Utts and Heckard, <u>Mind on Statistics</u>, 5th ed. custom printed for UConn, a Notebook that contains all the Overhead Slides used in the lecture and the Access code for the On-Line homework in Web-Assign. Note: You can purchase this bundled package two different ways: one option includes a paperback version of the textbook ($154); the other version has a link to the e-book in WebAssign and does not include the paperback version of the textbook ($110). If you want an actual paperback copy of the textbook, choose option1; if you choose to read the textbook on-line, choose option2.

COMPUTER MANUAL: McLaughlin, Wakefield, <u>An Introduction to Data Analysis Using MINITAB 17: A Fifth Custom Edition for UConn.</u>

<u>CALCULATOR:</u> I recommend the TI-83 or TI-84 Graphing Calculator. You may also use the TI-89 or the TINspire.

<u>Exam Schedule:</u>

Friday, February 16th	**Exam #1**
Friday, March 23th	**Exam #2**
Friday, April 20th	**Exam #3**

 **** Exams will be held at the following times and in the following rooms:

   Sections 15 thru 25: ITE C-80 from 6:50 AM to 8:15 AM

   Sections 31 thru 40: SCHN 151 from 8:30 AM to 9:55 AM

****Please note: The exam should take approximately 1 hour. I like to allow an extra half hour due to the large size of the class. If you have a class that conflicts with this time extension, please see me and we can make other arrangements.

<u>STUDENT INFORMATION:</u>

1. **Exams** will cover material from text, supplementary readings, lectures, Discussion Section assignments, homework assignments and MINITAB assignments. If you are unable to be present on an exam date, you must notify me **on or before** the exam date to arrange a Make-Up Exam.

*** MAKE-UP EXAMS WILL NOT USE THE MULTIPLE CHOICE FORMAT ***

2. **MINITAB (a statistical software package) Computer Assignments:** We will be doing Chapters in the MINITAB Manual. These MINITAB assignments require the use of the MINITAB software. You can access this software through Uconn software On-line. The procedure for accessing this software will be discussed during your first discussion section with your TA's.

    Each MINITAB Chapter presents a new set of MINITAB instructions. I suggest that you read through the chapter and follow the instructions in MINITAB to learn the techniques for that particular chapter. At the end of the Chapter there is an **assignment**. Complete the assignment. **Be sure to include all graphs that are required. Note: Your TA will assign a specific version of the data files in the MINITAB assignments to be used in your discussion section.**

    Each MINITAB computer assignment is worth 10 points.

3. **Homework Assignments:** We will be using the On-Line homework system that accompanies the textbook. In your bundled package of materials (Textbook, Notebook and Web-Assign) you will have an Access Code to the Website (WebAssign) for the Homework. To access WebAssign, go to the HuskyCT page for our lecture, Stat1100, and you will find a link

to WebAssign in the menu on the left side of the page. Click on the link and enter the access code that was included with your bundled package. If you did not purchase the bundled package of course materials, once you click on the WebAssign link inHuskyCT, you will need to purchase an access code directly on the site. The cost for the access code only is approximately $50.00.

Each assignment will be worth 5 points. These sets of assignments are due on the exam dates. You can do an assignment as many times as you would like so that you can always earn a perfect score. Late assignments are not accepted.

4. **Discussion Worksheets and Lecture Worksheets:** In your Discussion Section and in some Lectures you will work on Worksheets that relate to the material that is presented in Lecture. These worksheets will be available to you thru HuskyCT. Worksheets that you will use in your Discussion sections will be available in the Disc. Section Husky site; worksheets that will be used in lecture will be available in the HuskyCT site for the lecture. Each worksheet is worth 5 points.

5. **Course Grade**

Exams 1, 2 and 3 are each worth 17% of your final grade; MINITAB, WebAssign homework assignments, Discussion and Lecture Worksheets combined are worth 25% of your final grade and the Final Exam is worth 24% of your final grade.

In the past, students have asked if there were any extra-credit assignments for this course and I did not have any. So, I am now including an **Optional Project**. The idea of the project is to give you an opportunity to work with a real data set. If you choose to do this optional project (I will post details on our Huskypage), I will recalculate your Course Grade in the following way:

Exams 1, 2 and 3 are worth 12% each and the Extra-Credit Project is worth 15% of your final grade; MINITAB, WebAssign homework assignments and Discussion and Lecture Worksheets combined are worth 25% of your final grade and the Final Exam is worth 24% of your final grade.

6. **Use of HuskyCT**: HuskyCT will be used throughout the course. I will maintain a main site for the lecture. Your TA will maintain a site for your Discussion Section. **It is your responsibility to check both sites for assignments.** Your TA will explain how he/she will be using the Discussion section site. Here is the information that will be available to you in the lecture site:

a.) **Syllabus:** You will see a Syllabus icon on the Homepage. If you click on that, you can access this syllabus.

b.) **Weekly Information:** I will maintain a weekly information folder that I will post in Husky CT. This will show you exactly what we are covering during that week and also what you are required to do (On-Line homework, Minitab assignments, Textbook reading and supplemental reading.) To view this weekly information, click on the **Syllabus and Weekly Information Learning Module** on the Homepage and then click on the specific week in the Table of Contents.

c.) **Audio Files:** Prior to each exam I will post an Audio file that you can use as you prepare for the exam.

d.) **Grades:** We will be posting all your grades in HuskyCT. This includes Test Grades and WebAssign HW grades (in the main Lecture site), Minitab Grades and Lecture Worksheet and Discussion Worksheet Grades (in the Discussion section site). It is your responsibility to

confirm these grades. Please let us know as soon as possible if there are any discrepancies. All grades posted by mid-semester (Friday March 23rd) must be confirmed and changes must be made at that point. All grades for the second half of the course must be confirmed and changes must be made by May 4th.

Stat 1100 Optional Project

Overview: The purpose of the project is to give you an opportunity to see what it is like to actually collect data and analyze it.

If you choose to do this optional project, refer to the grading system described above in the syllabus to see how this project will be incorporated into your grade.

I will post the details of the project in HuskyCT.

Policy Statement: People With Disabilities

The University of Connecticut is committed to achieving equal educational opportunity and full participation for persons with disabilities. Please contact me during office hours to discuss academic accommodations that may be needed during the semester due to a documented disability. If you have a disability for which you wish to request academic accommodations and have not contacted the Center for Students with Disabilities (CSD), please do so as soon as possible. The CSD engages in an interactive process with each student and reviews requests for accommodations on an individualized, case-by-case basis. The CSD collaborates with students and their faculty to coordinate approved accommodations and services. The CSD is located in Wilbur Cross, Room 204 and can be reached at (860) 486-2020 or at csd@uconn.edu. Detailed information regarding the process to request accommodations is available on the CSD website at www.csd.uconn.edu.

University Policy Statements

Please use the following link for university policies on absences from final examinations, class attendance, policies against discrimination and harassment: http://provost.uconn.edu/syllabi-references/