Statistics MATH 235
Section 80 (online class)
Syllabus Spring 2025

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Office hours (CM 217): Monday and Wednesday 8:30 – 9:30 am & 12:45 – 2:00 pm; Tuesday and Thursday 8:30 – 10:00 am & 11:45 am – 2:00 pm
Tutors Available: Online and in-person tutoring with Brandy and company in the Math & Science Resource Center, CM 233, email bkribs@lc.edu or call 618-468-4118 for more information; more information given below

This is an online class. That means you will work on your own, using the resources I describe here. For each section, you should complete the Class Notes, including mentioned worksheets. Only then should you attempt the MyStatLab (MSL) homework. **There is *no* in-person component of the class (except for exams for which you will come to campus).**

We will cover the material with a mix of class notes, ungraded worksheets, and questions. Please feel free to ask questions and pose comments through email. My lessons (via Class Notes) contain lots of examples similar to the homework problems. You will save yourself much stress by studying the notes before you start your homework. Do the homework promptly and thoroughly. Practice will help you immensely.

You will do all of your homework assignments and exams through MyStatLab (MSL). Homework counts for a good deal of your grade so it is crucial that you keep up with the assignments. You can work your homework assignments at any computer with internet access. Again, exams will be done on campus and in MSL.

You will want a three-ring binder notebook to keep your notes. I have available Class Notes which you should complete before doing the graded MSL homework. You will have a MyStatLab (MSL) assignment to complete for each section. (Chapters 1 through 3 are condensed into one assignment each.) You should keep a dedicated spiral notebook or section of your larger binder for your organized, labeled (online) homework. Do *not* just use scraps of paper as you need it. Keep all work in one place to make it easier to study and ask questions.

Website (www.stlmath.com):
My Website has many resources for you. You will use it to get resources I made or when you need clarification of a policy. If I refer to "the Website", I am referring to www.stlmath.com. You can access everything you need from here including the following.

> -- Class Notes (including videos for most and completed PDF versions for others) which work you through definitions and examples
> -- Tentative exam schedule, a list of the exams, the sections they cover, and tentative dates
> -- Syllabus, handouts, worksheets, and solutions to some of the worksheets
> -- Archived worksheets that may help you review or extend certain topics
> -- Link to the publisher-provided MyStatLab (MSL) Website

Textbook, Calculator, and MyStatLab:
· *Statistics: Informed Decisions Using Data*, Michael Sullivan, 2021, sixth edition. We will cover most of chapters 1 – 14. The book is available through MyStatLab (MSL, described later) in electronic form. It is possible to have access to MyStatLab and use the electronic book instead of purchasing a paper copy.

· MyStatLab (MSL) is an offshoot of MyMathLab (MML) which you may have used in another math class. MyStatLab (MSL) is virtually identical to MyMathLab (MML) except that it has some statistical capabilities. I often refer to either product as "MyMathLab".

· Your college fees paid for access to MyStatLab (MSL). The MyStatLab Website (http://www.mymathlab.com) provides practice problems and tutorials. There will be graded homework assignments from MSL. If you used MSL or MML for a previous class, you can use your previous login (username and password) information. If you do, be sure you have given them your current email address. Below you will see how to access MSL. The process is dramatically different than in the past.

· **To start up MSL, we are using Willo, a system from the bookstore's parent company Follett. This is fairly new to me as it may be to you, so please have patience.** Start on the Blackboard (Bb) page for your class and follow the link (on the home page for our class) that is labeled Pearson Course Materials. This link should take you to MSL where you need to enter your previous credentials for MyMathLab or enroll as a new user. After you complete the log-in process, the Pearson Course Materials link in Bb will take you directly to the MSL site. In the future, you can log-in to their site directly at www.mymathlab.com. If Blackboard is down for some reason, remember that the MSL site is still available at www.mymathlab.com. **You must be enrolled by February 1.**

This new process does *not* require you have an access code or course ID as we have done in the past. **If something goes wrong at any time and you are unable to do homework, contact customer support and tell me immediately so it can be remedied quickly.**

· **You need a graphing calculator.** The calculators range in price but are very similar in function. The college officially suggests you get the TI-83 or TI-84 (TI stands for Texas Instruments). Most TI-83 instructions on my worksheets will also work for the TI-84. The TI-82, TI-85, and TI-86 are older models but will work fine. If you are not sure about your calculator, show it to me and we will see if it will work. Regardless of calculator type, I am willing to help you with it, but there are no guarantees. I am willing to help you with other non-TI brands as well. Please have your calculator with you when completing Class Notes or homework. You need to get your calculator as soon as possible. You may also want to consult the manual if it's a non-TI brand. **It is *not* acceptable to attempt this class without a graphing calculator.**

· If you do *not* have an actual calculator, it is okay to use an app on your phone or graphing calculator emulator program on your computer. You can borrow calculators in the Math Resource Center (CM 233, described later). However, you must borrow a *non-phone* calculator for taking exams in Haskell (described later).

· We will use the calculator a lot in class. There are many instances in the Notes where your calculator is needed. I can help but it is your responsibility to learn to use your calculator. Learn it well and it can be of great use to you in this class. Please ask questions when you have issues. The Math Resource Center (CM 233, described later) is also a great place to go for help.

Evaluation/Point Breakdown:

MyStatLab (MSL) Homework Assignments	25% of total
Average of Four Exam Grades (MSL)	75% of total

· The grade scale is A – 90%, B – 80%, C – 70%, D – 60%. Your grade information will be available through MyStatLab (MSL). Your overall grade shown in MSL will be accurate if you keep up with the assignments. **Grades are *not* shown in Blackboard.**

· It is your responsibility to print out Class Notes and Worksheets from the Website. When this is possible, the item will be underlined. Click on it to open it, and then print it. Printers are available in select computer labs around campus. Alternatively, if you visit my office, I will provide you with copies of the Notes I have. Use the extensive videos and other resources available on MyStatLab (MSL) and www.stlmath.com.

· You will see worksheets mentioned in the Class Notes. They are available on www.stlmath.com under Assorted Handouts and Tutorials on the Math 235 page. They are carefully designed to help you tackle hard concepts but will *not* be collected. You should work hard on all worksheets and assignments and ask questions when you have them.

· We will have four exams. The exam component of your grade will be the average of these scores. You are required to take all exams. The exams will be in MSL and available all semester. **You are allowed to use your book and notes on the exams but you will work on your own. You must come to campus for exams as described later (Haskell Hall).** You are required to get a score of at least 20% on all relevant homework before taking an exam. That way, you will not accidentally take a test without doing the homework first.

· The breakdown of book material on each exam and tentative dates are below. This may change slightly.

Exam	Sections covered	*Suggested* Dates (Exams are available the entire semester.)
1	Chapters 1-3, 4.1-4.4	February 17 – 21
2	5.1–5.5, 6.1, 6.2, 7.1-7.3	March 24 – 28
3	8.1, 8.2, 9.1, 9.2, 10.1–10.3	April 14 – 17 (The school is closed April 18.)
4	11.1-11.3, 12.1, 12.2, 13.1, 13.2	May 12 – 16 (May 16 is the last day of the semester.)

· The dates above are highly suggested to keep you on schedule. Below, you will find another suggested schedule that includes when you should be doing the homework as well. There are no strict deadlines for the exams or homework. If you miss the period stated here, simply do the assignment as soon as you are ready. Exams will have passwords and it is mandatory that you go to Haskell to take them. You will only have one attempt for each exam so be sure you are ready.

· You will take exams in the **Haskell Testing Center** which is located in **Haskell Hall (HK) B-25**. (It is located in the basement of Haskell Hall.) The **Haskell Testing Center's information is found at www.lc.edu/testing**; read this information carefully. **You will need to make an appointment each time. Their phone number is 468-5232; their email address is testingcenter@lc.edu.** You must show a **photo ID** to take your exam. Make sure you take your *non-phone calculator*. You will *not* be allowed to use your own computer. If you would prefer to make up your exam in Edwardsville, Jerseyville, or Carlinville, you will see the information for those alternative locations on their Website. You do *not* need my permission to use one of these alternative testing centers.

· The homework due dates are set for the Monday after the week you should be working on each section (technically, they are due at midnight of the due date). You can work the homework as much as you want up through May 16. There are due dates listed for the Homework assignments in MSL but they are only suggestions. All homework assignments are available after the "due date" with no penalty. That being said, this class is extremely full and homework should be done nearly every day to keep up.

Suggested Schedule for Homework and Exams		
MSL Assignments to be Completed * **& Topics**		**MSL Suggested Due Date**
* There will be a separate MSL assignment for each section for chapters 4 through 14. Chapters 1-3 are condensed into one section of Notes and one MSL assignment each.		
Chapter O (Orientation) and Chapter 1		Monday, January 27
Chapter 2		Monday, February 3
Chapter 3, Section 4.1		Monday, February 10
Sections 4.2 - 4.4		Monday, February 17
Exam 1	**Chapters 1-3, 4.1-4.4**	Feb. 17 - 21
(Keep up the good work!)		
Sections 5.1 - 5.3		Monday, March 3
Sections 5.4, 5.5, 6.1		Monday, March 10
Sections 6.2, 7.1-7.3		Monday, March 17
Spring Break is March 17 – 21		
Exam 2	**5.1–5.5, 6.1, 6.2, 7.1-7.3**	March 24 - 28
Sections 8.1, 8.2, 9.1		Monday, April 7
Sections 9.2, 10.1-10.3		Monday, April 14
Exam 3	**8.1, 8.2, 9.1, 9.2, 10.1–10.3**	April 14 – 17 (School closed April 18.)
(Almost there! Keep it up.)		
Sections 11.1 - 11.3		Monday, April 28
Sections 12.1, 12.2, 13.1		Monday, May 5
Section 13.2		Monday, May 12
Exam 4	**11.1-11.3, 12.1, 12.2, 13.1, 13.2, 14.3**	May 12 – 16 (May 16 is last day of semester.)

· Homework will take some time to complete, so make sure you give yourself plenty. Plan on doing a little homework every day. **Keep in mind you do *not* need to do an assignment in one shot. You can start it one day and finish it another. In fact, you can go back and redo problems you missed to get full credit.** The MyStatLab (MSL) Website offers tons of help on the problems including the **Ask My Instructor** button, which lets you email me a short message along with the exact problem you are working on. Use this to ask specific questions about a problem.

· MyStatLab (MSL) has provided videos that you can watch through the Multimedia Library (menu item). You may find they fill in holes left by the Class Notes. However, they are *not* mandatory and do *not* count toward your grade. The Class Notes focus on the material in the homework. You definitely want to complete the Class Notes on www.stlmath.com before you attempt the MSL homework. Be sure to email me questions. I have posted pre-recorded videos from my Math 145 class (which covers some of the same material) and completed versions of the Math 235 Notes (for those sections for which I do not have videos). You should always attempt to complete the Notes on your own before accessing the completed versions.

· **Keep in mind that the "Overall grade" in the MSL Gradebook does *not* include assignments that you have *not* started. The grade will look considerably higher than what you are actually earning if you have zeros on assignments.** At the end of the semester, when I figure your course grade, your grade may drop significantly when it figures those zeros into your score. Do *not* let a high overall score (or worse, a low C) in MSL fool you into not working hard to the end. It is important that you keep current with the homework so your grade is accurate.

· **The final date of submission for MSL homework is Friday, May 16.** You will *not* be able to change your MSL grade after that date. The MSL site can be bogged down at the end of the semester which makes doing homework the last week of class very frustrating. Do *not* wait 'til the last minute to do it.
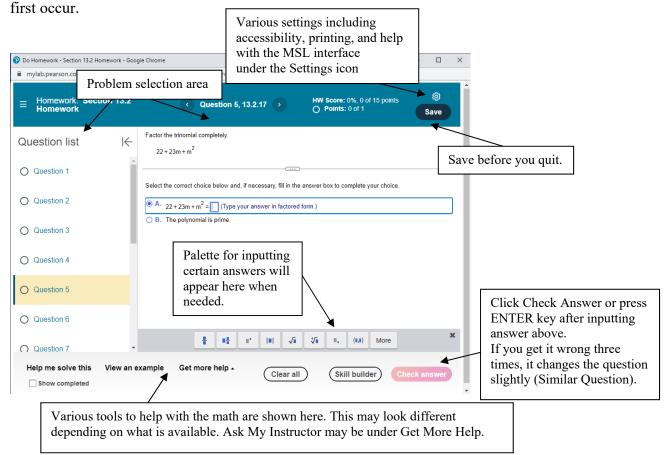
Attendance and makeup policies:

· We are *not* holding in-person classes as this is an online class. It is your responsibility to complete Class Notes provided on www.stlmath.com and then complete MSL homework assignments and exams. Any given week, you should maintain a schedule so that you are studying the sections that are due the upcoming Monday. A workable (but full) suggested schedule is given earlier. Work the MSL homework as you complete sections of Class Notes so the material is fresh in your mind.

· If you miss an exam, simply do the accompanying homework and exam as soon as you are able. You will make appointments with Haskell as described earlier. There will be no penalty for late work. The last exam *cannot* be missed as the last day it is available is the last day of the semester.

MyStatLab (Quick Tutorial):
Below you will find a sample homework assignment in MSL. You can select any problem in the set to work on. This is particularly useful when you are returning to a set to correct mistakes. Notice a check mark or an X indicates if you got it right or wrong (not shown on this example). Once you click in the answer space, an appropriate palette that allows you to enter fractions, radicals, exponents, etc. exactly as you would write them will appear. You are often expected to use the palette to enter your answers in the correct form. On the lower left-hand side, you will notice help topics that includes videos, completed examples, and other resources at your disposal. There is help available (and an option to print) under the Settings icon in the upper right if you have trouble with the interface as opposed to the math.

Rounding errors are possible if you do too much rounding early in a problem so do *not* round your answer until the very end. Be careful to follow the instructions on how to enter your answers. Specifically, they will denote how to round and what form your answer should be in. The instructions may vary from problem to problem. After you complete a problem, you must click "Check Answer". Make sure you Save your work (top) before exiting.

Use the Ask My Instructor option (possibly under Get More Help on bottom) to report problems with grading or to ask specific questions about a problem. It is easy to get frustrated with an online tool like MSL. Be sure to reach out with questions when they first occur.

Various settings including accessibility, printing, and help with the MSL interface under the Settings icon

Problem selection area

Save before you quit.

Palette for inputting certain answers will appear here when needed.

Click Check Answer or press ENTER key after inputting answer above.
If you get it wrong three times, it changes the question slightly (Similar Question).

Various tools to help with the math are shown here. This may look different depending on what is available. Ask My Instructor may be under Get More Help.

Miscellaneous details:

· I want you to feel comfortable with me and the class. If there is anything I can do to help you, please tell me. If I use the wrong pronoun (her versus him) in addressing you or mispronounce your name, please forgive me and tell me what is correct. If you are ever made to feel uncomfortable in the class or at school in general, please bring the issue to my attention.

· The handouts on the Website are in PDF format; you will need the Adobe Acrobat Reader to read these. The Reader is available online at www.adobe.com -- just follow the links to download the latest Acrobat Reader. It is free of charge. There are optional worksheets listed at the bottom of the "Assorted Handouts and Tutorials" portion of the Website. Use them for extra practice.

· If you need to contact me, phone or email me. I may send emails to either your LC email account or the email account you give to MSL. If you do *not* use your LC email account frequently, please get in the habit or set it up to forward your mail to an account you do use. Email is inherently insecure; meaning if someone wanted to, they could read our emails. Be aware of this when you and I correspond.

· The **Math Resource Center (MRC, located in CM 233)** is available for in-person and online tutoring Monday through Friday 8:00 am – 4:30 pm. Contact bkribs@lc.edu or call 618-468-4118 to set that up. Their Website is linked from my Website where you can find other information.

· The last day for a full refund is January 31. The last day to withdraw with a grade of W is April 25 (to avoid a D or F). The last day of the semester is Friday, May 16.

Accommodations: If you need an accommodation based on the impact of a disability, inform your instructor as soon as possible. You can request accommodations at www.lc.edu/access or contact the Center of Access and Accommodations at (618) 468-4123 or access@lc.edu. Center for Access and Accommodations is located in Fobes 1523.

Counseling: Counseling is by appointment and on an emergency walk-in basis. Visits are confidential, free of charge, and include counseling for crisis intervention, brief therapy, academic issues, test anxiety, community resources, and referrals. Contacts: Brooke Frank: bfrank@lc.edu, (618) 468-4130. Terri Austin: taaustin@lc.edu, (618) 468-4125.

Veteran Services: We support our veteran and service member students and their families by providing a Veteran Services Department and a Veterans' Resource Center. This department supplements the assistance provided by Enrollment, Advising and Financial Aid. You can confidentially discuss academic or personal issues. Referrals will be made as needed to campus and/or community assistance. Contact Sarah Albright (BA 2450) at 618-468-5312 or salbright@lc.edu.

Diversity Statement: At Lewis and Clark Community College, we are seriously committed to supporting diversity and inclusion in our classrooms and community. We proactively strive to construct a safe and inclusive environment by respecting each other's dignity and privacy. We treat one another fairly and honor each member's experiences, beliefs, perspectives, abilities, and backgrounds, regardless of race, religion, language, immigration status, sexual orientation, gender identification, ability status, socio-economic status, national identity, or any other identity markers. Bullying, hateful ideas, violent language, belittling, racial slurs, and other disrespectful or "othering" language or behavior will not be tolerated. We behave and communicate respectfully toward one another, both directly and indirectly, both inside and outside the classroom. A diverse and inclusive campus is our strength, and we want all who are part of our campus community to feel safe and respected.

If you ever have any concerns about the classroom climate, please reach out to Mya Lawrence, Director of Diversity, Equity, and Inclusive Excellence, NU L134, 618-468-6030, mylawrence@lc.edu

Academic Continuity Statement:
In the event of an unexpected campus closure or delayed start, course requirements, deadlines and grading percentages are subject to change when necessitated by revised

course delivery, semester calendar or other circumstances. Information about changes in this course will be emailed to you from my email address soleary@lc.edu. If the course is not able to meet face-to-face, look for an email from me. Students are also encouraged to continue the readings and other assignments as outlined on this syllabus or subsequent syllabi.

L&C Policy on Academic Honesty: Cheating Intentionally using or attempting to use unauthorized materials, information or study aids; use of any unauthorized assistance, resources, materials or electronic/cellular devices with or without photographic capability in taking quizzes, tests or examinations and the acquisition, without permission, of a test or other academic material belonging to Lewis & Clark Community College, to any department, or to any staff.

Lewis and Clark Community College is committed to maintaining a safe and healthy educational and employment environment that is free from sex discrimination, which includes discrimination and harassment based on sex, sex stereotypes, sex characteristics, pregnancy and related conditions, sexual orientation, and gender-related identity and expression. The College also prohibits all forms of sex-based misconduct, including but not limited to sexual violence, domestic violence, dating violence, and stalking. Faculty are legally required to report incidents of sex discrimination or misconduct brought to their attention through any sources and thus cannot guarantee confidentiality. To file a complaint, contact Sean Hill, Title IX Coordinator, at shill@lc.edu or 618-468-6000; or Mya Lawrence, Deputy Title IX Coordinator, at mylawrence@lc.edu or 618-468-6030. Students who wish to confidentially report an incident of sex discrimination may contact Terri Austin, Counselor, at taaustin@lc.edu or 618-468-4125; or Brooke Frank, Case Coordinator, at bfrank@lc.edu or 618-468-4130. Students can also leave an anonymous message on the college's toll-free number for reporting sexual violence at 855-RSV-4RSV (855-778-4778) or send an email to 4rsv@lc.edu. Please visit https://www.lc.edu/4RSV for more information.

Plagiarism: Plagiarism at LCCC will not be tolerated. Plagiarism includes the reproduction of ideas, words or statements of another person as ones' own without acknowledgement or use of an agency engaged in the selling of term papers or other academic materials. If instructor has reason to believe students are in violation of this policy, students will be notified and appropriate action will be taken.

LCCC Plagiarism statement: Assignments that have been copied from another student or another source will not be scored. "Academic dishonesty including, but not limited to, cheating, plagiarism, and forgery, violates the STUDENT CONDUCT CODE and will lead to disciplinary action up to and including expulsion". The following website will give you in-depth information on the definition of plagiarism and more: http://www.plagiarism.org/article/what-is-plagiarism Please visit this site if you need clarification.

Unauthorized Collaboration: Unauthorized collaboration among students will not be tolerated. Unauthorized collaboration is defined as intentionally sharing or working

together in an academic exercise when such actions are not approved by the course instructor. Academic exercises include but are not limited to all face-to-face and/or online classroom assignments, activities, exams, quizzes, worksheets, online discussion questions, term papers, case studies, projects, research, or any other requirement assigned by the instructor for which students receive individual grades. If the instructor has reason to believe students share or work together collaboratively on such academic exercises, the student(s) will be notified and at the minimum, receive a zero on the assignment.

Facilitation of Academic Dishonesty: Permitting or attempting to help another to violate the academic honor code; Alteration or sabotage of another student's work, such as tampering with or modifying any online or written assignments including but not limited to quizzes, exams, worksheets, term papers, case studies, projects, research, discussion board entries, etc. If the instructor has reason to believe students facilitate academic dishonesty, the student(s) will be notified and appropriate action will be taken.

Virtual Meeting Policy: By participating in our live events, you are acknowledging awareness that, depending on your involvement, your name, voice, comments, and likeness may be recorded and shared with other L&C students and faculty. If you are uncomfortable participating with these acknowledgements, please contact your course instructor for alternate arrangements.

· **Stef's additional comment:** In the case you go virtual, feel free to *not* allow Zoom to use your video camera and to use an alias. If you do use an alias, please tell me in a private chat or email so I know who you really are. I want you to be comfortable in my class. The Zoom sessions are recorded and made available to the class through a password-protected folder on my Website. Tell me if you need anything.

· **Blackboard:** We will *not* be using Blackboard except for enrolling in MSL at the beginning of the semester. You will spend most of your time outside of class in MSL or www.stlmath.com.

· **What Students can expect from Online Instructors**
Students can expect their instructor to:
1. respond to questions/problems within 48 hours.
2. log into the course 5 out of 7 days a week; and
3. provide continued grade statuses throughout the semester using either a calculated column in the grade book (in MyStatLab) or a report sent through email.

· **Course Description and Topics:**
Examines basic concepts of statistical analysis used in decision making in business, social and life sciences, including probability and how uncertainty is dealt with in real life. Includes assembly and summarization of data, measures of central tendency and variability, probability theory, discrete and continuous probability distributions, estimation, one- and two-sample hypothesis testing for means and proportions, correlation regression analysis, multiple regression, chi-square, and one-way analysis of variance. Integrates graphing calculator technology and statistical computer software in the learning process.

1.1 Introduction to the Practice of Statistics
1.2 Observational Studies versus Designed