

# Statistics for Business I

## ECON-3402

Spring 2022 Section N03 3 Credits 01/08/2022 to 05/10/2022 Modified 01/09/2022

### Description

Course emphasis is on applications of statistics in business. Topics include methods of presenting data, numerical measures and correlation, probability theory and probability distributions, sampling distributions, estimation, and hypothesis testing.

#### Requisites

Prerequisites:

(MATH 1111 or MATH 1113 ) and CISM 2201 and Richards Col Upper Division RCUD

Corequisites:

### Contact Information

#### Dr. Trung Ly

Email: [trungly@westga.edu](mailto:trungly@westga.edu)

Office: Roy Richards Sr. Hall 345

Email is the primary mode of communication between you and me throughout this course. You are required to check your university-assigned email account for all class instructions and updates. You are encouraged to ask questions via email but should expect that it may take up to 24 hours to receive a response. If you do not receive a response after 24 hours, please follow up with another email. Due to the large number of emails I get on a daily basis, please start the subject line with "ECON 3402-XX", where XX is the section number.

All email correspondence should be professional, and should make use of a salutation, a sign-off, proper grammar, and as little slang as possible. This policy is not to encourage formality for its own sake, but rather to build habits to prepare you for your professional life after graduation.

Note: the only email I check is the one listed above. I NEVER check the mailbox that is provided within CourseDen.

#### Office Hours

- Mondays, Wednesdays, Tuesdays, and Thursdays 2:00 PM to 4:00 PM
- By appointment (please send me an email to make an appointment)

In order to attend office hours, I ask that you sign up at this link (<https://calendly.com/trunglyuwg> (<https://calendly.com/trunglyuwg>)). Once you make an appointment, you will receive a confirmation email with the date and time and a link to join the online meeting with me via Google Meet. If you use a computer, you just have to click on the link in the email. If you use a mobile device (phone or tablet), you may have to install Google Meet, which is a free app.

### Meeting Times

This course is an online course. **We will only meet once for an in-person final exam** (more on this below). Instructional materials will be provided online through videos in which I walk you through the material as if you attend lectures in person. The videos are uploaded to the Content tab on CourseDen.

Videos are organized into different topics. The videos in each topic are arranged in the order that you should watch them, so just watch the videos in the preset order, i.e. do not shuffle. The topics are numbered, and you should watch them in the order from the smallest-numbered playlist to the largest-numbered one.

While I do not track your "video watching" progress, it is nearly impossible to do well in this course without watching the videos. I am more than happy to help you with course material as long as you watch the videos and put forth the proper effort.

## Discussion board

You are encouraged to participate in the discussion board on CourseDen. The discussion board can be accessed by logging on to CourseDen, clicking on the "Assessments" drop-down menu, and choosing "Discussions". This is where you can post (anonymously if you would like) any questions about the materials you may have while studying for the class. You can also answer questions that others have posted. I will answer questions on the discussion board twice a week, once on Wednesday and once on Sunday as well.

Before posting to the discussion board, please keep in mind these rules of netiquette (I copied these off of the Internet):

1. Before posting your question to a discussion board, check if anyone has asked it already and received a reply.
2. Stay on topic – Don't post irrelevant links, comments, thoughts, or pictures.
3. Don't type in ALL CAPS!
4. Don't write anything that sounds angry or sarcastic, even as a joke, because without hearing your tone of voice, your peers might not realize you're joking.
5. Always remember to say "Please" and "Thank you" when soliciting help from your classmates.
6. Respect the opinions of your classmates. If you feel the need to disagree, do so respectfully and acknowledge the valid points in your classmate's argument. Acknowledge that others are entitled to have their own perspective on the issue.
7. If you reply to a question from a classmate and you're not 100% sure that your response is accurate, make sure you say so.
8. Don't badmouth others or call them stupid. You may disagree with their ideas, but don't mock the person.
9. If you refer to something your classmate said earlier in the discussion, quote just a few key lines from their post so that others won't have to go back and figure out which post you're referring to.
10. Check the most recent comments before you reply to an older comment, since the issue might have already been resolved or opinions may have changed.
11. Be forgiving. If your classmate makes a mistake, don't badger him or her for it. Just let it go – it happens to the best of us.
12. Run a spelling and grammar check before posting anything.

## Tips on studying for the course

Some things you can do to do well in this class include, but are not limited to:

- Given that this is an online course that affords you the freedom to learn the materials at your own pace, it may be tempting to delay watching video lectures and complete problem sets. Don't. Make sure you spend a certain amount of time every week to watch the video lectures for that week and practice questions in the problem sets so that you are not overwhelmed by the amount and the difficulty of the materials. In other words, approach this course as if it were an in-person course.
- On a related note, you may be tempted to seek third-party help with your problem sets throughout the course. While you're not forbidden from seeking help on problem sets, it is in your best interest to make sure you learn and understand the materials to pass the final exam and the course.
- Watch the video lectures and take notes as if you were attending an in person course. If you come across something that you don't understand, write it down.
- Do your best to find answers to things you don't fully understand above by posting in the discussion board or making an appointment to see me during office hours.
- Do a lot of exercises or practice problems on Connect. Do them a few times if you have to to understand every step. This will help you prepare for the exams.
- My job is to help you succeed, so help me help you by letting me know as soon as possible if you feel lost.

## Materials

# Statistical Techniques in Business and Economics

Author: Douglas Lind and William Marchal and Samuel Wathen

Publisher: McGraw-Hill

Edition: 18

The textbook used in this course is Statistical Techniques in Business and Economics by Wathen, Lind, and Marchal, 18th Edition. We use the Connect software that accompanies the textbook for problem sets and exams (more on Connect assignments below). You can purchase an access code through McGraw-Hill or from the bookstore. The access code gives you access to Connect as well as an eBook within the platform.

## Outcomes

---

LO1-Construct and interpret tabular and graphical methods of presenting qualitative and quantitative data (LG2, LG3, LG10)

LO2-Construct and interpret summary and numerical measures of location, variability, and association for the sample and the population (LG2, LG3, LG10)

LO3-Apply basic probability concepts, expected value and variance to a variety of different business applications (LG2, LG6, LG10)

LO4-Use discrete and continuous probability distributions and sampling distributions in a variety of business applications (LG2, LG3, LG6, LG10)

LO5-Construct and interpret interval estimates and hypothesis tests (LG2)

## Evaluation

---

### Criteria

Final grades for the course are based on the following:

Type	Weight	Topic	Notes
Problem sets	30%		
Midterm 1	20%		
Midterm 2	20%		
Final exam	30%		

### Breakdown

I reserve the right to change this grade distribution if necessary

Grade	Range	Notes
A	90%+	
B	80%-89.99%	
C	70%-79.99%	
D	60%-69.99%	
F	Below 60%	

## Assignments

---

### Problem sets

There is generally a problem set for each main topic covered in class. These problem sets are administered on Connect. You can do these problem sets as many times as you want before the due date. **Even though Connect may show you the average of all your attempts for each problem set, note that when I import grades from Connect to CourseDen at the end of the semester, only the score from your best attempt for each problem set will be transferred and used to calculate your grade.** After the due dates, you can still attempt these problem sets as many times as you'd like, but those attempts will not be used for grade calculation. The purpose of these problem sets is twofold: first, they allow you to apply what you learn in lectures to specific problems; and second, they help you become familiar with Connect.

## Readings

There are several articles that are available under the Content tab on CourseDen. The purpose of these articles is to show you the importance of things we learn in this course in the business world. These articles are required and there will be questions on the exams that are taken directly from them. You are not expected to memorize the content, but you should know in general what each article discusses.

## Exams

There are two midterm exams, both of which are administered on Connect. The majority of the questions on the midterms come straight from the problem sets on Connect (similar questions with different sets of numbers). There are two things you have to do for each exam:

1. Answer the questions and submit your exam on Connect.
2. As you work on the exam questions, you should be writing down how you arrive at the answers on separate sheets of paper. Within five (05) minutes of when you submit your exam on Connect, you have to take pictures of your written work and submit them on CourseDen by going to the Assignment section under the Assessments drop-down menu. Alternatively, you can also email me your work.

Your written solutions should show all your work. If you don't show all the work leading up to the final answers you submit on Connect, you will not get full credits even if your final answers (on Connect) are correct. It is your responsibility to ensure that your written solutions are legible and that the quality of the photos is acceptable. What you submit to me should be something you feel comfortable submitting if this were a traditional face-to-face course. In other words, think of this as submitting an exam in a traditional face-to-face course.

Five points will be deducted for every minute your written solutions are submitted late. If you do not submit your written solutions at all, I will not grade your test, which results in a zero.

If there is anything that you feel prevents you from fulfilling this portion of exams, please let me know within the first week of the course.

The midterms are tentatively scheduled for Wednesday, February 23 and Wednesday, April 6.

**The final exam will be held in person during finals week.** This requirement cannot be waived. I will notify you once I know the time and location. If you are unable to come to campus for the final exam, you can take it at an approved testing location off campus. If you choose to do so you may be charged a service fee by the location you pick.

## Academic integrity

I take academic integrity very seriously. You are expected to take the exams on your own without any outside help which includes in-person as well as online resources. Academic dishonesty, such as communicating during a test, using external materials for assistance on a test, or copying someone else's assignment, will result in a grade of zero for the relevant assignment. All cases of suspected Academic Integrity violations will be sent to the Office of Community Standards.

## Schedule

---

## College/School Policies

---

## Wolf Pact

Having read the Honor Code for the University of West Georgia, I understand and accept my responsibility to uphold the values described therein and to conduct myself in a manner that will reflect the values of UWG and the Richards College of Business so as to respect the rights of all UWG community members. As a UWG student, I will represent myself truthfully and complete all academic assignments honestly and within the parameters set by my instructor.

I understand and accept that if I am found guilty of violations (through processes due me as a UWG student and outlined in the UWG Student Handbook), penalties will be imposed.

I also recognize that my responsibility includes a willingness to confront members of the UWG community if I feel there has been a violation of the Honor Code.

Ultimately, I will conduct myself in a manner that promotes UWG as the best place to work, learn, and succeed for my generation, and those to come!

## About the Richards College of Business

### Vision

To become a globally recognized college of business preparing forward-thinking, responsible leaders.

### Mission

We are in the business of transforming lives through education, engagement, and experiences.

### Strategic Goals and Values

#### *Student Success*

Admit quality students and provide them with an education that is rich in experiences and engagement opportunities to prepare them to be effective and ethical professionals.

#### *Academic Success*

Recruit, retain and develop faculty and staff by providing sufficient resources to support dynamic and up-to-date bachelor and master-level curricula, to conduct research and other professional activities, and to support engagement with all stakeholders.

#### *Operational Success*

Recruit, retain and develop administrative management and staff personnel to manage, develop and support infrastructure and those activities that build internal and external partnerships while working in an ever-changing environment.

#### *Ethical Values*

The Richards College of Business community (administrators, faculty, staff, students, and business partners) share a commitment to the principles of honesty and integrity in interactions and undertakings, accountability for personal behavior, and respect for the rights, differences, and dignity of others. In addition, we strive to continuously improve our abilities to recognize unethical behavior and to make ethical and moral decisions.

## Institutional Policies

---

### Academic Support

**Accessibility Services:** Students with a documented disability may work with UWG Accessibility Services to receive essential services specific to their disability. All entitlements to accommodations are based on documentation and USG Board of Regents standards. If a student needs course adaptations or accommodations because of a disability or chronic illness, or if he/she needs to make special arrangements in case the building must be evacuated, the student should notify his/her instructor in writing and provide a copy of his/her Student Accommodations Report (SAR), which is available only from Accessibility Services. Faculty cannot offer accommodations without timely receipt of the SAR; further, no retroactive accommodations will be given. For more information, please contact [Accessibility Services \(https://www.westga.edu/student-services/counseling/accessibility-services.php\)](https://www.westga.edu/student-services/counseling/accessibility-services.php).

**Center for Academic Success:** The [Center for Academic Success \(http://www.westga.edu/cas/\)](http://www.westga.edu/cas/) provides services, programs, and opportunities to help all undergraduate students succeed academically. For more information, contact them: 678-839-6280 or [cas@westga.edu](mailto:cas@westga.edu).

**University Writing Center:** The [University Writing Center \(https://www.westga.edu/writing/\)](https://www.westga.edu/writing/) assists students with all areas of the writing process. For more information, contact them: 678-839-6513 or [writing@westga.edu](mailto:writing@westga.edu).

## Online Courses

UWG takes students' privacy concerns seriously: technology-enhanced and partially and fully online courses use sites and entities beyond UWG and students have the right to know the privacy policies of these entities. For more information on privacy and accessibility for the most commonly used sites, as well as technology requirements visit the [UWG Online \(https://uwgonline.westga.edu/\)](https://uwgonline.westga.edu/) site.

Students enrolled in online courses can find answers to many of their questions in the [Online/Off-Campus Student Guide \(http://uwgonline.westga.edu/online-student-guide.php\)](http://uwgonline.westga.edu/online-student-guide.php).

If a student is experiencing distress and needs help, please see the resources available at the [UWG Cares \(http://www.westga.edu/UWGCares/\)](http://www.westga.edu/UWGCares/) site. [Online counseling \(https://www.westga.edu/student-services/counseling/index.php\)](https://www.westga.edu/student-services/counseling/index.php) is also available for online students.

## Honor Code

At the University of West Georgia, we believe that academic and personal integrity are based upon honesty, trust, fairness, respect, and responsibility. Students at West Georgia assume responsibility for upholding the honor code. West Georgia students pledge to refrain from engaging in acts that do not maintain academic and personal integrity. These include, but are not limited to, plagiarism, cheating, fabrication, aid of academic dishonesty, lying, bribery or threats, and stealing.

The University of West Georgia maintains and monitors a confidential Academic Dishonesty Tracking System. This database collects and reports patterns of repeated student violations across all the Colleges, the Ingram Library, and the School of Nursing. Each incidence of academic dishonesty is subject to review and consideration by the instructor, and is subject to a range of academic penalties including, but not limited to, failing the assignment and/or failing the course. Student conduct sanctions range from verbal warning to suspension or expulsion depending on the magnitude of the offense and/or number of offenses. The incident becomes part of the student's conduct record at UWG.

Additionally, the student is responsible for safeguarding his/her computer account. The student's account and network connection are for his/her individual use. A computer account is to be used only by the person to whom it has been issued. The student is responsible for all actions originating through his/her account or network connection. Students must not impersonate others or misrepresent or conceal their identities in electronic messages and actions. For more information on the University of West Georgia Honor Code, please visit the [Office of Community Standards \(https://www.westga.edu/administration/vpsa/ocs/index.php\)](https://www.westga.edu/administration/vpsa/ocs/index.php) site.

## UWG Email Policy

University of West Georgia students are provided a MyUWG e-mail account. The University considers this account to be an official means of communication between the University and the student. The purpose of the official use of the student e-mail account is to provide an effective means of communicating important university related information to UWG students in a timely manner. It is the student's responsibility to check his or her email.

## Credit Hour Policy

The University of West Georgia grants one semester hour of credit for work equivalent to a minimum of one hour (50 minutes) of in-class or other direct faculty instruction AND two hours of student work outside of class per week for approximately fifteen weeks. For each course, the course syllabus will document the amount of in-class (or other direct faculty instruction) and out-of-class work required to earn the credit hour(s) assigned to the course. Out-of-class work will include all forms of credit-bearing activity, including but not limited to assignments, readings, observations, and musical practice. Where available, the university grants academic credit for students who verify via competency-based testing, that they have accomplished the learning outcomes associated with a course that would normally meet the requirements outlined above (e.g. AP credit, CLEP, and departmental exams).

## HB 280 (Campus Carry)

UWG follows University System of Georgia (USG) guidance: [http://www.usg.edu/hb280/additional\\_information#\(http://www.usg.edu/hb280/additional\\_information\)](http://www.usg.edu/hb280/additional_information#(http://www.usg.edu/hb280/additional_information))

You may also visit our website for help with USG Guidance: [https://www.westga.edu/police/campus-carry.php\(https://www.westga.edu/police/campus-carry.php\)](https://www.westga.edu/police/campus-carry.php(https://www.westga.edu/police/campus-carry.php))

## Mental Health Support

If you or another student find that you are experiencing a mental health issue, free confidential services are available on campus in the [Counseling Center](#). Students who have experienced sexual or domestic violence may receive confidential medical and advocacy services with the Patient Advocates in [Health Services](#). To report a concern anonymously, please go to [UWGcares](#).

## ELL Resources

If you are a student having difficulty with English language skills, and / or U.S. culture is not your home culture, specialized resources are available to help you succeed. Please visit the [E.L.L. resource page](#) for more information.

## COVID-19

The University System of Georgia recognizes COVID-19 vaccines offer safe, effective protection and urges all students, faculty, staff, and visitors to get vaccinated either on campus or with a local provider. Additionally, everyone is encouraged to wear a mask or face covering while inside campus facilities. The system continues to work closely with the Georgia Department of Public Health to prioritize the health and safety of our campus communities

For the most recent information on coronavirus disease (COVID-19) visit:

- [UWG's Guidance on Face Coverings \(https://www.westga.edu/coronavirus-info/return-to-campus/faq/what-is-the-guidance-on-the-use-of-face-coverings.php\)](https://www.westga.edu/coronavirus-info/return-to-campus/faq/what-is-the-guidance-on-the-use-of-face-coverings.php)
- [Centers for Disease Control and Prevention FAQ \(https://www.cdc.gov/coronavirus/2019-ncov/faq.html\)](https://www.cdc.gov/coronavirus/2019-ncov/faq.html)
- [Georgia Department of Public Health \(https://dph.georgia.gov/\)](https://dph.georgia.gov/)

## Additional Items

---