Florida State University, Department of Statistics

Main office 214 OSB, phone 850-644-3218 FSU Police non-emergency: 850-644-1234

Emergency: 911

All times stated on the syllabus, on Canvas, in emails, etc, will be Eastern Time.

Course Information

Term Year: Spring 2025 Name: Fundamental Business Statistics Credit-hours: 3

Code: STA 2023 Sections: 0001 (large-lecture) & 0002-0019 (recitations)

Prerequisites: None, but we recommend two years of high school algebra.

Special Note: High school students who earn a "3" or better on the AP Statistics exam can be given credit for

STA 2023.

Format: Face-to-face. Students will need to follow the University's current health and safety guidelines when

they attend class.

Class Meeting Days, Times, Locations: classes will meet Jan 6 to Apr 25.

Large-lecture: Mon & Wed 1:20-2:10pm in HCB 0101

Recitations: Fridays at different times in different rooms, see Syllabus module on Canvas.

There will be no final exam, however, the final quiz will be given during final exams week. It will be online on Canvas and will be available from 12:01am Monday Apr 28 to 11:59pm Wednesday Apr 30.

PRE Program @ ACE: Free Academic Assistance

This class will be participating in the Proactive Referral and Engagement (PRE) program (https://ace.fsu.edu/pre-student-fags). The purpose of this program is to give you early academic assistance and advice so that you succeed in this class. Therefore, your course instructor may share information about your class performance with the PRE program director, who may reach out to you via email or phone. The PRE program director and ACE staff can connect you to one-on-one assistance with study skills tutors to discuss time management, develop a study plan, find tutoring, and/or connect with offices to support your success.

Instructor Information

Name: Ms. Radha Bose; please call me "Radha" 😊



Email: rbose@fsu.edu

You may expect a response from me within two work days. However, please note that the first two weeks and the last two weeks of classes, and final exams week, are usually email-heavy times for us, so we may not be able to respond to individual student emails in a timely manner. If we find that many students are asking the same question, we may answer it in an email sent to the entire class or in an announcement on the course Canvas, instead of responding to your individual emails.

Office Hours & Location: Mondays 3:00-4:00pm in OSB 325. If you are unable to come at this time, please email me to set up an appointment.

Office hours will begin in the second week of classes and end in the last week of classes. However, if you need to see me in the first week of classes or in final exams week, please email me to set up an appointment.

TA Information

Teaching Assistant (TA) names, email addresses, office hours and assigned sections are **in the Syllabus module on the course Canvas**. TA office hours will begin in the second week of classes.

Please be aware that all Teaching Assistants who have been assigned to work with the instructor of this class will have access to your grades and academic accommodations information since it is not possible for the instructor alone to perform all of the duties related to grading and the provision of academic accommodations.

Course Access

- Course website: https://canvas.fsu.edu

- Canvas Support

Email: canvas@fsu.edu
Phone: 850-644-8004
Website: https://support.canvas.fsu.edu/home/
Hours: 8am-5pm, Mon-Fri

- Please turn on the course notifications on Canvas by going to Account/Notifications and selecting the *Notify immediately* option for all of the items under Course Activities.
- Please check your FSU email, your Canvas Inbox, and the course announcements on Canvas every day.
- If you communicate with me via email, please use your <a>@fsu.edu account.
- We will not use an online proctoring service.
- Classes will not be recorded for future viewing.

Course Description

In this course, students will utilize descriptive and inferential statistical methods in contextual situations, using technology as appropriate. The course is designed to increase problem-solving abilities and data interpretation through practical applications of statistical concepts. This course is appropriate for students in a wide range of disciplines and programs.

Student Learning Outcomes

This course has been approved to meet CoreFSU's **Quantitative and Logical Thinking** requirements and helps you become a critical analyst of quantitative and logical claims. In order to fulfill the State of Florida's College mathematics and computation requirement the student must earn a "C—" or better in the course.

By the end of the course, students will demonstrate the ability to:

- 1. Select and apply appropriate methods (i.e., mathematical, statistical, logical, and/or computational models or principles) to solve real-world problems.
- 2. Use a variety of forms to represent problems and their solutions.
- 3. Students will visualize and summarize data using descriptive statistics.
- 4. Students will apply basic probability concepts to draw reasonable conclusions.
- 5. Students will employ concepts of random variables, sampling distributions, and central limit theorem to analyze and interpret representations of data.
- 6. Students will choose an appropriate method of inferential statistics, including confidence intervals and hypothesis testing, to make decisions about a population based on sample data.
- 7. Students will model linear relationships between quantitative variables using correlation and linear regression.

Required Materials

- A portable computer, reliable internet connection, and Chrome or Firefox browser.
- A TI-84 Plus or equivalent calculator or app. We will teach you how to use a TI-84 series calculator, but we cannot promise to be able to help with any other type of calculator.

A textbook is not required for this class. The instructor will post all required course notes and exercises on Canvas. Please note that the materials provided by the instructor were put together for your individual use only. We ask that you do not distribute the materials to third parties. If you seek help from someone other than the instructor or TA, you may allow your helper to see the materials, but please do not allow them to take pictures or make copies or in any other way take our material. We appreciate your co-operation in protecting our material. Thank you!

Additional Resource

The following free online textbook is an additional resource that you might find useful: Introductory Statistics from OpenStax, Print ISBN 1938168208, Digital ISBN 1947172050, www.openstax.org/details/introductory-statistics.

Video/audio recordings

Please note that any recordings provided by the instructor are the property of Florida State University and are being made available only to the students enrolled in this class. Students are not permitted to share the recordings with any person or entity outside of this class. Copyrights of the recordings are reserved by the creators of the recordings and Florida State University.

Note on Technology-dependent Assessments

This course is technology-dependent. While we will do our best to work with you on technology issues, please be aware that if you take an assessment but we can find absolutely no record of the fact, then we will not be able to give you credit for it. Please do not use Safari when you take assessments on Canvas, please use Chrome or Firefox.

Completing missed assessments in order and in a timely manner so that you can stay on track

Please note that missed assessments must be completed in order. Therefore, an extension on a specific assessment will not be granted if you have prior outstanding assessments. For example, if you request an extension on Assessment 8 but you did not complete Assessment 3, then you will be denied an extension on Assessment 8 until you have completed Assessment 3. The last day of classes will be the deadline for all assessment submissions, including assessments where extensions were granted (makeups), but not including the final assessment. In addition, since this is a semester-long college course, designed to be taken one step at a time throughout the semester rather than hurriedly over the span of a few days, or a few weeks, we will not grant extensions during the last two weeks of classes unless you have completed the QLT assessment and at least eighty percent of the other assessments given up to that point. For example, if the QLT assessment and ten other assessments have been given by the start of the last two weeks of classes, then you will need to have completed the QLT assessment and at least eight other assessments by that point in order to be granted any extensions (makeups) during the last two weeks of classes.

Grade Structure

| Component/Category | Percentage Weight | Graded for | Help permitted | No. of submissions permitted |
|--|----------------------|----------------------------|-------------------|------------------------------|
| MonWed Lecture Attendance | 10% | Attendance | | 1 |
| MonWed Lecture Quizzes | 10% | Accuracy | Yes | 1 |
| Fri Recitation Participation | 10% | Attendance & Participation | | 1 |
| QLT Assessment (done outside of class) | 10% | Accuracy | No | 2 |
| Topic Quizzes (done outside of class) | 60% | Accuracy | No | 2 |
| Total | 100% | | | |

Course grade calculation: (Lecture Attendance average * 0.1) + (Lecture Quiz average * 0.1) + (Recitation average * 0.1) + (QLT Assessment * 0.1) + (Topic Quiz average * 0.6)

Lecture Attendance (A)

- + Consists of attending class every Monday and Wednesday, staying for the entire period, paying attention to the lecture, and taking the **attendance** quiz on Canvas.
- + You will need to be able to go on Canvas during the lectures to take these quizzes, so please bring an appropriate device to class.
- + Each attendance quiz will only be available for a few mins and only one attempt will be permitted.
- + The lowest four grades will be dropped.
- + For each **attendance** quiz, if you are unable to take it before you leave the classroom (potentially due to connection issues, etc), please come up to me right then and there in the classroom and give me your name, and I will ensure that you credit for it. Emails sent to me afterwards about not being able to take the quiz will not be accepted.

Lecture Quizzes (LQ)

- + Consists of attending class every Monday and Wednesday, staying for the entire period, paying attention to the lecture, and taking the **lecture** quiz on Canvas.
- + You will need to be able to go on Canvas during the lectures to take these quizzes, so please bring an appropriate device to class.
- + Each **lecture** quiz will be based on the same day's lecture, will only be available for a few mins, will be graded for accuracy and only one attempt will be permitted.
- + The lowest four grades will be dropped.
- + For each **lecture** quiz, if you are unable to take it before you leave the classroom (potentially due to connection issues, etc), please come up to me right then and there in the classroom and give me your name and your answer to the quiz question(s), and I will ensure that you get credit for your correct answers. Emails sent to me afterwards about not being able to take the quiz will not be accepted.

Recitation Participation (R)

- + Consists of attending class every Friday, staying for the entire period, and fully participating in the recitation group activities.
- + Each activity will have approximately the following format: (i) each group member will identify a concept they had trouble with or would like to know more about; (ii) the group will discuss these concepts and try to answer everyone's questions; (iii) the group will check with the recitation TA to see if the questions were correctly answered; (iv) the group will work on practice problems assigned by the TA.

- + Each group will email their responses to the first three items above to their TA <u>by the end of the recitation</u> <u>period</u>. The email should have each item clearly marked or labeled and should be as descriptive/detailed as possible (an example is given on a later page). One group member will email the TA <u>and copy the other group members</u>. Ideally, the person who emails the TA would be someone who did not have that role in the previous two recitations. This entire exercise is expected to last about half an hour. The group will spend the remaining time discussing the assigned practice problems and getting clarification/guidance from the TA. No submission is required for the practice problems, however, you may want to write out solutions for your own benefit. <u>You are expected to do the remaining practice problems at home before you take the relevant quiz.</u>
- + You will need to be able to email the TA, and potentially go on Canvas, during the recitations, so please bring an appropriate device to class.
- + Groups will consist of 2-4 persons and will be assigned by the TA each time; group composition will change each week.
- + Since the goal of the exercise is to contribute to as well as benefit from the group synergy, working alone will not be permitted.
- + Each grade will be one of the following:
 - 0 = absent;
 - 1 = present but arrived late or left early, or present for the entire period but did not participate;
 - 2 = present and participated for the entire period.
- + The lowest two grades will be dropped.

The policies below will apply to both Lecture Attendance and Recitation Participation.

- + The above-mentioned drops were designed to cover and will be used to cover your excused absences as described in the University Attendance Policy, which is stated on a later page in this syllabus.
- + If you have documentation for an excused absence, please email it to me (rbose@fsu.edu) within two weeks of the absence but not after the last day of classes. Documentation will not be accepted after the two-week time frame, nor after the last day of classes.
- + If the number of your excused absences exceeds the number of drops stated above, then you will need to have submitted documentation of ALL of your excused absences (except for religious holidays) in order for additional allowances to be made.
- + Your quiz and QLT Assessment completion (not the actual grades, just whether you did them or not), and potentially your overall attendance, will be taken in to consideration when making a decision on additional allowances.
- + If your grade for either the lecture attendance component or the recitation participation component drops below 50%, your access to the quizzes may be restricted.
- + Students who have an attendance accommodation certified by the OAS will be excused whenever they are absent due to a disability-related reason. To be excused, please email me (rbose@fsu.edu) and specifically state, "I missed class on mm/dd/2024 due to a disability-related reason." You will fill in the appropriate month and day. I must receive your email within one week of the absence.
- + FSU athletes will be excused whenever they are absent due to sports-related events that we are directly notified of by FSU Athletics.

QLT (Quantitative and Logical Thinking) Assessment

The QLT Assessment is the assessment instrument that the Dept of Statistics has chosen to use to measure student performance on the two CoreFSU Quantitative and Logical Thinking (QLT) student learning outcomes (SLOs). These are the first two SLOs listed on the syllabus. The QLT Assessment grades, broken down by SLO for each student, will be reported to the CoreFSU committee, to be used in their evaluation of how well the

SLOs are being achieved. That data is then used for institutional accreditation purposes. Student names are not reported.

The QLT Assessment will be based on the *Simple Linear Regression* material and will be given after the material is taught. It will not be the final assessment. The QLT assessment forms a mandatory ten percent of the course grade. If you do not take it, you will not be permitted to pass the class, regardless of how well you perform on the other assessments. The QLT assessment will be an individual-work open-book online quiz graded for accuracy; two timed attempts will be allowed; collaboration is not permitted; no AI or unsanctioned internet sources are allowed apart from the course Canvas. The correct answers will not be published.

Topic Quizzes (Q)

- + Online on Canvas, open-book, graded for accuracy.
- + For each quiz, an announcement will be posted on Canvas to let you know when the quiz will be available, what topics it will cover, etc. Each announcement will be posted a couple of days in advance. Please check the class announcements every day so that you do not miss these quiz announcements.
- + Two timed attempts permitted for each quiz.
- + Collaboration and internet sources, except the course Canvas, are not permitted.
- + Correct answers are not published.
- + Canvas will show which questions you got partial credit on but will not identify the specific parts of each question that you got wrong.
- + Questions that need to be graded manually will be graded after the quiz closes.
- + Quizzes must be taken in ascending numerical order.
- + Quiz grades will not be dropped but due dates will be extended if warranted.
- + Extensions must be requested within one week of the original due date but not after the last day of classes.
- + Your lecture attendance, recitation participation and QLT assessment completion will be taken into consideration when extensions are requested.
- + For individual students, if extended due dates are repeatedly missed, we reserve the right to stop giving extensions.
- + If you request a quiz extension, please check your email every 12 hours until you receive a response saying that the extension was granted/denied.
- + If multiple quiz extensions are required due to exceptional circumstances, then only one extension will be granted at a time, and the extensions will follow the ordering of the quizzes. After you submit an extended quiz, you will email your TA and ask them to reopen the next one. Please note that it may take a day or two for the quiz to be reopened after you send your email, so you should send your email in a timely manner and check your email every 12 hours for a response.

General Info on Assessments

- ~ The use of AI (artificial intelligence) and unsanctioned internet sources is not permitted on any of the assessments in this class. All internet sources are considered unsanctioned unless the instructor specifically states in writing that a given source is sanctioned.
- ~ You will be allowed a second attempt on some or all of the online assessments so that you can correct any errors you may spot after you submit the first attempt. We cannot promise to be able to provide assistance with the material between attempts.
- ~ An initial grade of zero will be assigned to missed or incomplete assessments, including attendance absences. When the assessment is completed, the zero will be replaced with the earned grade.

- ~ Please check your grades every Wednesday to make sure that your most recent assessment grades have been uploaded to Canvas. If your grades are not there, please let your TA know immediately.
- ~ If you believe that the grade you received on an assessment is incorrect, please bring it to your TA's attention within two work days after the grade has been made available on Canvas. If no issues are raised during that time frame, then it will be assumed that the grade is accepted and subsequent requests for a grade review may not be granted.
- ~ You are expected to adhere to all assessment deadlines. However, if you do miss a deadline, please discuss it with us regardless of the reason you missed the deadline. We will do our best to work with you while maintaining fairness to the other students in the class.
- ~ Bear in mind that the opportunities presented in this class are made equally available to all students in the class and it is up to each individual to make the most of these opportunities.
- ~ In the interests of fairness, we will not do for one student what we cannot do for all students who are likely to request the same.
- ~ Documentation for missed assessment deadlines, if required, will not be accepted after the last day of classes.

Grading scale (percent)

Your letter grade will be selected from the grading scale below after rounding your overall numerical course grade up to the next higher whole number.

| A = [93, 100]% | B+ = [87, 90)% | C+ = [77, 80)% | D+ = [67, 70)% | F = [0, 60)% |
|----------------|----------------|----------------|----------------|--------------|
| A- = [90, 93)% | B = [83, 87)% | C = [73, 77)% | D = [63, 67)% | |
| | B- = [80, 83)% | C- = [70, 73)% | D- = [60, 63)% | |

Incomplete Grade Policy

Incomplete ("I") grades will be recorded only in exceptional cases when a student, who has completed a substantial portion of the course and who is otherwise passing, is unable to complete a well-defined portion of a course for reasons beyond the student's control. Students in these circumstances must petition the instructor and should be prepared to present documentation that substantiates their case. Incomplete grades will not be granted to allow students to do extra coursework in an effort to increase their grade.

How to aim for success in this class

- ~ bring your computer and all of the printed material that you have for this class, and your calculator, to the classroom every day
- ~ attend all of the MonWed lectures, pay attention, fill in the notes as demonstrated by the instructor, ask questions
- ~ after the lectures, study thoroughly the information and examples in the notes, including the handwritten work that was done in class
- ~ do all of the associated practice problems, study the solutions even if you get the answers right because the solutions can provide insights to the problems
- ~ make sure you know how to use your calculator appropriately
- ~ attend all of the Friday recitations, discuss the material with your classmates and your TA, ask questions, give and receive help
- ~ take the quiz the following week and utilize the second attempt if you get less than 100% on the first attempt, the higher of the two grades will be kept
- ~ in general, stay engaged with the course as this will help you to assimilate and retain the material taught
- ~ last but not least, get enough sleep your brain needs downtime in order to process and store information

University Attendance Policy

Excused absences include documented illness, deaths in the family, and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid written excuse. Consideration will also be given to students whose dependent children experience serious illness.

Drop and Withdrawal deadlines are given in the University's Academic Calendar at https://registrar.fsu.edu/calendar/.

If you are absent often or absent for an extended period of time, and/or you do not respond to emails from the instructor over an extended period of time, the instructor reserves the right to deny access to assessments or limit the number of allowed attempts until attendance and/or contact is resumed.

Attendance is expected at all class meetings, regardless of whether there is a grade associated with attendance or not. While I will post completed course notes on Canvas, the notes are not intended to be a textbook and there will inevitably be information conveyed face-to-face in class that will not be reflected in the notes.

Academic Honor Policy

The Florida State University Academic Honor Policy outlines the University's expectations for the integrity of student's academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to "... be honest and truthful and ... [to] strive for personal and institutional integrity at Florida State University." (Florida State University Academic Honor Policy, found at http://fda.fsu.edu/academic-resources/academic-integrity-and-grievances/academic-honor-policy)

Academic Success

Your academic success is a top priority for Florida State University. University resources to help you succeed include tutoring centers, computer labs, counseling and health services, and services for designated groups, such as veterans and students with disabilities. The following information is not exhaustive, so please check with your advisor or the Department of Student Support and Transitions to learn more.

Americans with Disabilities Act

Florida State University (FSU) values diversity and inclusion; we are committed to a climate of mutual respect and full participation. Our goal is to create learning environments that are usable, equitable, inclusive, and welcoming. FSU is committed to providing reasonable accommodation for all persons with disabilities in a manner that is consistent with the academic standards of the course while empowering the student to meet the integral requirements of the course. Students with disabilities needing academic accommodation should: (1) register with and provide documentation to the Office of Accessibility Services; and (2) request a letter from the Office of Accessibility Services to be sent to the instructor indicating the need for accommodation and what type; and (3) meet (in person, via phone, email, skype, zoom, etc...) with each instructor to whom a letter of accommodation was sent to review approved accommodations. Please note that instructors are not allowed to provide classroom accommodations to a student until appropriate verification from the Office of Accessibility Services has been provided. This syllabus and other class materials are available in an alternative

format upon request. For the latest version of this statement and more information about services available to FSU students with disabilities, contact the:

Office of Accessibility Services 874 Traditions Way 108 Student Services Building Florida State University Tallahassee, FL 32306-4167 (850) 644-9566 (voice) (850) 644-8504 (TDD)

oas@fsu.edu
https://dsst.fsu.edu/oas

Academic accommodations will be provided as soon as possible after email notification from the OAS is received. Academic accommodations are not retroactive, so they will not apply to lectures/lessons and assessments that took place before the notification was received.

Sexual Misconduct and Title IX Reporting

As an instructor, I am obliged to report all instances of sexual misconduct and other Title IX issues that I become aware of to the University's Title IX Director; I cannot hold such information confidential. If you would like to discuss your situation in confidence, you may contact the Victim Advocate Program (https://dos.fsu.edu/vap/), Counseling & Psychological Services (https://counseling.fsu.edu/), the Employee Assistance Program (https://eap.fsu.edu/), University Health Services (https://eap.fsu.edu/), or pastoral counselors. If you would like to submit a report to the University's Title IX Director, please go to https://report.fsu.edu/).

Confidential Campus Resources

Various centers and programs are available to assist students with navigating stressors that might impact academic success. These include the following:

Victim Advocate Program
University Center A, Rm. 4100
(850) 644-7161
Available 24/7/365
Office Hours: M-F 8-5

https://dsst.fsu.edu/vap

Counseling and Psychological Services (CAPS)

Florida State University's Counseling and Psychological Services (CAPS) primary mission is to address psychological needs and personal concerns, which may interfere with students' academic progress, social development, and emotional well-being. The following in-person and virtual (tele-mental health) services are available to all enrolled students residing in the state of Florida:

- 1. Individual therapy
- 2. Group therapy
- 3. Crisis Intervention
- 4. Psychoeducational and outreach programming
- 5. After hours crisis-hotline

6. Access to community providers for specialized treatment Call 850-644-TALK (8255) for more information on how to initiate services.

Counseling and Psychological Services 250 Askew Student Life Center 942 Learning Way (850) 644-TALK (8255) Walk-in and Appointment Hours: M-F 8 am – 4 pm https://counseling.fsu.edu/

Services at UHS are available to all enrolled students residing in Florida:

The mission of University Health Services (UHS) is to promote and improve the overall health and well-being of FSU students. UHS provides a coordinated continuum of care through prevention, intervention, and treatment. Services include general medical care, priority care, gynecological services, physicals, allergy injection clinic, immunizations, diagnostic imaging, physical therapy, and a medical response unit. The Center for Health Advocacy and Wellness (CHAW) assists students in their academic success through individual, group, and population-based health and wellness initiatives. Topics include wellness, alcohol and other drugs, hazing prevention, nutrition and body image, sexual health, and power based personal violence prevention. For more information, go to uhs.fsu.edu.

University Health Services Health and Wellness Center 960 Learning Way Tallahassee, FL 32306 Hours: M-F, 8 am – 4 pm (850) 644-6230 https://uhs.fsu.edu/

Disaster

At times of severe weather or other disasters, please check your FSU email, your text messages, the Seminole Safe App and FSU Alert (https://alerts.fsu.edu/) as often as you can to keep yourself informed. In the absence of internet access, you may call 850-644-4636 for updates. Check for the latest information every day before you leave home so that you will not miss any last minute announcements. If the University closes due to a disaster, we will all be informed via the above means, and classes and office hours will be automatically cancelled even if I don't announce it. As long as the University remains open, classes will be held. However, please practice safety first. If it will be unsafe or impracticable for you to come to class or complete an assignment due to the effects of a disaster, please do not attempt to do so. You will not be penalized, we will work with you.

You can sign up to receive alerts via SMS text messages here: https://emergency.fsu.edu/services/fsu-alert-emergency-notification-warning-system/fsu-alert-sms-text-messages.

See here for other ways in which FSU delivers warnings: https://emergency.fsu.edu/services/fsu-alert-emergency-notification-warning-system.

Classes Subject to HB233 Recording

In this class, consistent with state law and university policy, students are permitted to make recordings of class lectures for personal use only. As noted, sharing, posting, or publishing classroom recordings may subject you to honor code violations and legal penalties associated with theft of intellectual property and violations of other state laws. Moreover, students and educators have expressed concern that recording classroom activities may negatively impact the learning experience for others, especially in classes that involve questions, discussion, or participation. To protect a learning environment in which everyone feels free to experiment with ideas, we ask you to refrain from recording in ways that could make others feel reluctant to ask questions, explore new ideas, or otherwise participate in class. Students must monitor their recordings so that they do not include participation by other students without permission. Students with disabilities will continue to have appropriate accommodations for recordings as established by the Office of Accessibility Services.

If you wish to make recordings of this class, please read the FAQs below very carefully before you make your first recording.

https://fda.fsu.edu/sites/g/files/upcbnu636/files/Media/Files/Fall-2021-Guidance/FAQ STUDENTS HB%20233.pdf

Syllabus Change Policy

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.

Guide to resolving academic problems

https://provost.fsu.edu/sites/g/files/upcbnu3446/files/2021-08/Academic-Problem-Solving-Flowchart-Binder.pdf

Resources at the Office of Faculty Development and Advancement

(some of the resources are for students too)

https://fda.fsu.edu/academic-resources

Example of recitation participation email sent to TA (let's say the TA's name is Clarice)

Email Subject:

Recitation 7

Email Body:

Hi Clarice!

1. OUR QUESTIONS

Priya had trouble distinguishing between disjoint and independent events.

Taylor did not understand what "conditional" meant.

Abram did not know how to calculate the probability of "A and B" when A and B are dependent.

Ty did not understand why you have to subtract the probability of the intersection when calculating the probability of "A or B".

2. OUR EXPLANATIONS

- The difference between disjoint and independent is that disjoint events cannot occur together while independent events may or may not occur together. Independent means that one event does not have the ability to affect the probability of the other event. We also explained to Priya that disjoint events can never be independent because if one happens it make the other unable to happen so it makes its probability zero (it affects its probability).
- Conditional means that you ignore one variable and just look at the overall probabilities of the other variable. We explained to Taylor that it's like collapsing the contingency table to just the totals row or totals column.
- The probability of "A and B" when A and B are dependent is calculated by multiplying the probability of A by the conditional probability of "B given A". We explained to Abram that when A and B are independent, then the probability of "B given A" is the same as the original probability of B, so that's why the multiplication becomes straightforward.
- We explained to Ty that you have to subtract the probability of the intersection because when you add the probabilities of A and B, the intersection gets added in twice, so it's being double-counted (like double-stuffed Oreos). We also discussed the fact that to calculate the probability of "A alone or B alone", you have to subtract the probability of the intersection twice because you don't want the intersection at all.

3. TA CONFIRMATION

You confirmed that all but one of our answers were correct. You pointed out that our explanation of "conditional" was wrong, and it was actually the explanation of "marginal". Conditional is when you only look at one category of one variable and then you look at the probabilities of all the categories of the other variable within the afore-mentioned single category of the first variable.

Thanks!

Priya, Taylor, Abram & Ty

Tentative Pacing Schedule

| Wk | MON 1:20-2:10pm, HCB 101 | WED 1:20-2:10pm, HCB 101 | FRI Please check your class schedule for your room and time. | | | |
|----|--|---|--|--|--|--|
| 1 | Jan 6 Preliminary Definitions | 8 Frequency Tables & Graphs | 10 Recitation 1 | | | |
| 2 | 13 Frequency Tables & Graphs | 15 Summary Statistics | 17 Recitation 2 | | | |
| 3 | 20 Martin Luther King Jr Day, no classes | 22 Summary Statistics | 24 Recitation 3 | | | |
| 4 | 27 Summary Statistics | 29 Summary Statistics | 31 Recitation 4 | | | |
| 5 | Feb 3 Summary Statistics | 5 Simple Linear Regression | 7 Recitation 5 | | | |
| 6 | 10 Simple Linear Regression | 12 Simple Linear Regression | 14 Recitation 6 | | | |
| 7 | 17 Probability | 19 Probability | 21 Recitation 7 | | | |
| 8 | 24 Probability | 26 Random Variables | 28 Recitation 8 | | | |
| 9 | Mar 3 Random Variables | 5 Random Variables | 7 Recitation 9 | | | |
| SB | 10-14 Spring Break | , | | | | |
| 10 | 17 Binomial Distributions | 19 Binomial Distributions | 21 Recitation 10 | | | |
| 11 | 24 Normal Distributions | 26 Normal Distributions | 28 Recitation 11 | | | |
| 12 | Mar 31 Central Limit Theorem | Apr 2 Central Limit Theorem | 4 Recitation 12 | | | |
| 13 | 7 Confidence Intervals for Mu | 9 Confidence Intervals for Mu | 11 Recitation 13 | | | |
| 14 | 14 Confidence Intervals for Mu | 16 Hypothesis Tests for Mu | 18 Recitation 14 | | | |
| 15 | 21 Hypothesis Tests for Mu | 23 Hypothesis Tests for Mu | 25 Recitation 15 | | | |
| FE | Final quiz available from 12:01am Monday Apr 28 to 11:59pm Wednesday Apr 30. | | | | | |