#### Math 10.24Z – Spring 2022



## **MATH 10 Elementary Statistics and Probability**

Winter 2022 Section D010.24Z, CRN 01225 Class Time: 1:30 – 3:45p Tues & Thurs

Instructor: Lisa Mesh Office Hours: Mon/Tue/Wed/Thur 12:30 – 1:20p Meeting ID: Passcode: E-Mail: meshlisa@fhda.edu

Class Zoom Meeting: Meeting ID: 984 8121 2399 Passcode: 833599 https://fhda-edu.zoom.us/j/98481212399?pwd=YzZxeFpYWTBONk5venVJTIBPWEVsZz09

## **Course Description**

This course is an introduction to data analysis making use of graphical and numerical techniques to study patterns and departures from patterns. The student studies randomness with an emphasis on understanding variation, collects information in the face of uncertainty, checks distributional assumptions, tests hypotheses, uses probability as a tool for anticipating what the distribution of data may look like under a set of assumptions, and uses appropriate statistical models to draw conclusions from data. The use of technology (computers or graphing calculators will be required in certain applications. Where appropriate, the contributions to the development of statistics by people from diverse cultures will be introduced.

## **Class Website / Canvas**

#### We'll be using CANVAS to manage our class documents and deadlines.

Your canvas connection should work, giving you access to all relevant course materials for our class. *If you know how to access Canvas, go to it*? Otherwise, try the steps below.

- 1 Log into MyPortal
- 2 Click on the III Apps link in the left-hand navigation on page then choose
- 3 Next, choose "Login to De Anza Canvas Site"
- 4 Once on the Canvas Site, select the following class.

## Sp22 MATH D010 Introductory Statistics 24Z

Our Canvas page contains access to all of the materials we'll need for our class. It includes links to the course syllabus, links to our online homework, class notes, and other useful items. It will be updated and modified throughout this quarter.

#### **Required Materials**

# All required materials for this class will be free, published online and accessible through Canvas. These materials include:

- 1. Class Workbook Notes: Published Online in Canvas.
- 2. **Textbook**: Published Online in Canvas.
- 3. Statistical/Analysis Tools: Published Online in Canvas.
- 4. **Online Homework:** MyOpenMath, with link and registration through Canvas.

Optional – Basic calculator: This will come in really handy. I recommend getting a cheap, basic calculator.



Load the Canvas App onto your phone & check it frequently !!

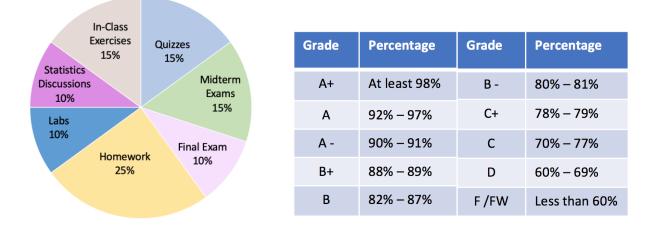
## **Class Structure – MATH 10**

Our class will meet twice a week via Zoom and will include lecture from our notes, discussion of homework and questions. This is a **synchronous class and student attendance is required**.

If a student misses a class, they are expected to check in with other students and/or the recorded lecture for that day and they will receive no credit for any in-class exercises that day (even if they submit it).

## Grades

The grade for this course will be assigned as follows:



## Make up Policy

- There are no make-up quizzes or exams for this class. All quizzes and exams must be taken on the date they are scheduled for.
- The final exam date and time have been determined and mandated by the college.
- No early/late final exam may be scheduled. If you know that you are unable to take the final at the date and time above, you must drop the class now.

Late Policy – Late homework, classwork or labs will not be accepted.

## Dropped/Replaced Grades

- Lowest In-Class Exercise score will be dropped.
- Lowest Statistics Discussion score will be dropped.
- Lowest Homework grade will be dropped.
- Lowest Quiz grade will be dropped.
- No Lab grades will be dropped.
- Lowest Exam grade will be replaced by Final Exam grade if the Final Exam grade is higher than the lowest exam grade. (For further detail, see **Final Exam** details on p. 5.)

#### In-Class Exercises (15% of course grade)

Online class participation is key to your success in this class.

In-class exercises will include but will not be limited to sharing lab results, answering questions during lecture, completing in-class worksheets, and quizzes/exams.

Scheduled online class time in Zoom on Tuesday and Thursday will have a short group work component, using Zoom breakout sessions. Group work will be completed during class. Submissions from students who are not in Zoom class when discussed will receive 0 points for that assignment.

#### Statistics in Our Lives Discussions (10% of course grade)

Each week, students will be required to participate in online discussions that will cover a variety of timely statistically-related topics.

## Labs (10% of course grade)

We will have 3 lab grades through the quarter.

- All grades will be included; no lab grades will be dropped.
- Lab exercises should be completed by teams of 1-4 students.
- Each lab team will turn in <u>one report per lab per team.</u>
- <u>The grade</u> on these assignments will be the same for all members of each lab team.

Some lab exercises may include a presentation component. Each member of a lab group should be prepared, if necessary, to turn in or present a completed group lab report when due. Questions regarding lab content and results may be asked on quizzes and exams.

#### Homework (25% of course grade)

Homework for each chapter will be submitted online and/or as handwritten upload.

- 1. Most homework will be submitted online via MyOpenMath.com (accessible through Canvas).
  - <u>MyOpenMath</u> is a free, online homework program that we'll be using to complete and submit online homework assignments. If you have any questions about homework, feel free to come to office hours or e-mail me at <u>meshlisa@fhda.edu</u>.
- 2. Handwritten work may also be required for some sections. This work will also be submitted via file upload into Canvas.

We'll have approximately 14 homework assignments to be completed.

- All homework is assigned in Canvas and will be due on dates indicated in Canvas.
- Homework must be submitted by the due date/time. No late homework will be accepted.

Homework assignments will be due each week. Deadlines will be noted in Canvas.

If you have homework questions, we'll try to answer them at the beginning of class (time permitting) or during daily office hours. If we cannot answer all questions during class, responses will be posted in Canvas.

Remember, homework help is also available through other tutors in the Student Success Center Online.

Late assignments will not be counted, but students will have the opportunity to open homework assignments for practice after due dates.

## Quizzes (15% of course grade)

Quiz dates are scheduled after we cover each chapter and these dates will be set in Canvas.

The lowest quiz grade will be dropped. There are no quiz extensions.

It is understood that life happens, and that you may miss a quiz during this quarter for some reason. It's really not fair to anyone to give late or make-up quizzes. With both of these thoughts, in mind, instead of providing make-ups, your *lowest quiz score is dropped*.

## Midterm Exams (15% of course grade)

We will have 3 midterm exams through the quarter in addition to the final.

- Midterm exams will be administered during class time and/or online outside of class time.
- Links and instructions for each exam will be posted in Canvas.
- Each of the midterm exams will cover only the material discussed since the previous test.
- Although tentative dates for these exams are posted on the course calendar in Canvas, we'll set each date firmly at least one week in advance.

It's important to know that you will be held accountable for your work, and you must demonstrate knowledge and proof of your answers, so <u>each Mid-Term Exam will have two components</u>.

- Some percentage of points will come from online score
- Some percentage of points will come from written details. Written details will include at least one of these components:
  - Responses to essay questions
  - Numbered (in order), detailed assumptions/work for each question to support online responses

## What happens if you miss a Mid-Term exam?

- I understand that you may be required to miss an exam because of circumstances in life, and our class policy is that <u>there are no late or make-up exams</u>.
- If you do miss an exam, your grade will be recorded as 0 in Canvas then, at the end of the quarter, your final exam will replace this 0 score.

## What if you get a really low score on a Mid-Term exam?

- If you don't miss any exams during the quarter, your final exam score will replace your lowest midterm exam score, even if your lowest exam score is a zero.
- Note that if your lowest mid-term exam score is the result of cheating or cell phone misuse, that score will <u>not</u> be replaced by the final exam score, but the next lowest will.

## Make sure that you submit your assignments and check that they have been submitted before the due date/time.

We will be using MyOpenMath for homework, quizzes and exams. If your grade for an assessment (homework/quizzes/exams) isn't recorded in the MyOpenMath log, you will not receive any credit for the assignment.

Please keep your work neatly written and organized. If I can't read your work or track your logic, you will not receive full credit.

## Final Exam (10% of course grade)

- Our Final Exam is scheduled to occur on Tuesday, 6/21/22.
- The Final Exam is mandatory.
  - You will have to take it if you want to get credit for the 10% of your course grade that it represents.
  - If you miss the final exam without contacting me (your instructor), you will receive a score of 0 on the Final Exam.
- The Final Exam is cumulative, covering all material in this course (Chapters 1 13 in our textbook).
- The Final Exam will be timed, will be administered online, and will last 2 hours.

The Final Exam will have 2 components, online and handwritten.

It's important to know that you will be held accountable for your work, and you must demonstrate knowledge and proof of your answers.

- Some percentage of points will come from online score
- Some percentage of points will come from written details. Written details will include at least one of these components:
  - Responses to essay questions
  - o Numbered (in order), detailed assumptions/work for each question to support online responses

## Tips for Success in our class.

#### Participate

- Ask questions. You can always e-mail me or ask questions during discussions or office hours.
- Work with others in this class.
  - Share contact information with classmates and work together.

#### Prepare

- Read and attempt the notes packs for each Chapter before we discuss them in class.
- Take notes.
- Attend Zoom sessions.

## Practice

- Work the assigned homework exercises (+ others!) and share questions.
- Be a meaningful contributor to labs. Don't just let your lab partner do all the work.

## **Reach out**

- Use resources in the Math, Science and Technology Learning Center: <u>http://deanza.edu/studentsuccess/servicesupdate.html</u>
  - For individual tutoring sessions: http://deanza.fhda.edu/studentsuccess/mstrc/weekly\_ind.html
- Attend our class weekly tutoring.
- Attend office hours. I'm happy to help, and I value your questions.

#### **Calendar of Course Events:**

Please use calendar in Canvas to note key deadlines, due-dates, and deliverables.

#### **Class Cancellation:**

If I need to cancel class or cannot attend, I'll e-mail you as soon as I can, using announcements via Canvas. Check our Canvas page and email for notices/announcements.

## Accommodations for Students with Disabilities:

If you are a student who has been found to be eligible for accommodations by Disability Support Services (DSS), please follow up to ensure that your accommodations have been authorized for the current quarter. If you are not registered with DSS and need accommodation, please go to the DSS office in the Registration & Student Services Building (RSS) (Room 141) for information on eligibility and how to receive support services. You can also go online to <a href="https://www.deanza.edu/dsps/dss/">https://www.deanza.edu/dsps/dss/</a> for additional help.

Speak with me privately after class or during office hours regarding your accommodations. All exams scheduled out of the classroom must be scheduled for a time period that at least overlaps class hours. Exams will not be authorized for vastly different time periods.

## HEFAS – Resource Center for Undocumented Students:

HEFAS (Higher Education for AB 540 Students) provides free services, reduces financial stress and creates a safe space for all with an emphasis on undocumented and AB 540 students. They are dedicated to building leaders, promoting social justice, and giving students tools to reach higher education regardless of the barriers that may exist. HEFAS provides free services like books and testing materials and connects students to on and off campus resources including tutoring, counseling and legal aid.

Location: ECOT-2

Website: https://www.deanza.edu/hefas

#### Key Dates to be aware of:

<b>APRIL 6</b>	First day of spring quarter classes
APRIL 16	Last day to add classes
APRIL 17	Last day to drop classes without a W
APRIL 29	Last day to request "Pass/No Pass"
MAY 27	Last day to drop classes with a W
MAY 28-30	Memorial Day Weekend - no classes, offices closed
JUNE 20	Juneteenth Holiday - no classes, offices closed
JUNE 21-24	Final exams
JUNE 24	Graduation

Our class final exam is scheduled to occur on Tuesday, 6/21/22.

## Dropping this class:

If a student doesn't attend class during the first 2 weeks of class, they will be dropped from this course by the instructor. After the first two weeks of class, it is each student's responsibility to drop this course.

## **Disclaimer:**

Any of information in this syllabus is subject to change if the instructor finds it necessary. Changes will be announced during a class session and those who are absent will be held responsible for any announced changes to the syllabus.

Congratulations! You've read our class syllabus. If you have any questions at all regarding our class, please ask me. I'm really looking forward working together.

## Calendar (Subject to Change)

Week 1	Introductions	
(4/6 - 4/8)	Ch 1 – Displaying and Analyzing Data with Graphs	
Week 2	Ch 2 – Descriptive Statistics	
(4/10-4/16)	Ch 3 – Populations and Samples	
Week 3	Ch 4 – Probability	
(4/17-4/23)		
Week 4	Exam 1	
(4/24 – 4/30)	Ch 5 – Discrete Random Variables	
(4/24 - 4/30)	Ch 6 – Continuous Random Variables	
Week 5	Ch 7 – Central Limit Theorem	
(5/1 – 5/7)		
Week 6	Exam 2	
(5/8 – 5/14)	Ch 8 – Confidence Intervals	
Week 7	Ch 9 – One Population Hypothesis Tests	
(5/15 – 5/21)		
Week 8	Ch 10 – Two Population Inference	
(5/22 – 5/28)		
Week 9	Exam 3	
(5/29 – 6/4)	Ch 11 – Chi-Square Tests	
Week 10		
(6/5-6/11)	Ch 12 – ANOVA	
Week 11	Ch 12 - Pagrossion Analysis	
(6/12 - 6/18)	Ch 13 – Regression Analysis	
Week 12	Final Exam	
(6/20-6/24)	(Tuesday, 6/21)	

## **Student Learning Outcome(s):**

\*Organize, analyze, and utilize appropriate methods to draw conclusions based on sample data by constructing and/or evaluating tables, graphs, and numerical measures of characteristics of data. \*Identify, evaluate, interpret and describe data distributions through the study of sampling distributions and probability theory.

\*Collect data, interpret, compose and defend conjectures, and communicate the results of random data using statistical analyses such as interval and point estimates, hypothesis tests, and regression analysis.