El Paso Community College
Syllabus
Instructor’s Course Requirements
Fall 2021

I. Course Number and Instructor Information

MATH 1342, FUNDAMENTALS OF STATISTICS
Prerequisite:  Math 0305 with a “C” or better or by placement exam

INSTRUCTOR'S NAME:  Leobardo Valera

CAMPUS AND OFFICE NUMBER:  TBA

TELEPHONE NUMBER:  (915) 267-7564

OFFICE HOURS:  M-W: 7:00 – 8:00 and by appointment

II. Text and Materials

A. Required Text


B. Materials

- Scientific calculator which has statistical functions such as mean, standard deviation, etc
- 1- 3-ring binder for notes, etc.
- The following are optional:
  Excel Manual
  TI-83/TI-83 Plus Manual

III. Course Requirements

A. Required Work

1. **Unit Exams (400 points):** There will be four (4) units exams worth up to 100 points each. **There will be no retakes on exams, and no exam grade will be dropped,** but if it is to the student’s advantage the final exam grade may replace one of the other four exam grades (see below for information on missed exams).

2. **Classwork/Homework (100 points):** Classwork and homework will be assigned throughout the semester to be picked up and graded occasionally. It is to the
student’s advantage to complete homework assignments on a daily basis. The average of the classwork/homework assignments will be worth 100 points.

3. **Final Exam (100 points)**: The final exam is comprehensive and mandatory. If student does not take the final exam, he/she will receive an “F” for the course. The final exam will not be dropped or replaced.

2. **Projects (100 points)**: There will be approximately four projects where you will reflect on what you have learned, explain key ideas, and investigate more involved problems. The average of the four projects will be worth 100 points.

**B. Grading Scale**

The Course grade will be determined by taking the total points earned dividing by the total possible number of points a student can earn, rounding to the nearest unit, and assigning a letter grade based on the following scale.

<table>
<thead>
<tr>
<th>Average Grade</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89%</td>
<td>B</td>
</tr>
<tr>
<td>70-79%</td>
<td>C</td>
</tr>
<tr>
<td>60-69%</td>
<td>D</td>
</tr>
<tr>
<td>0-59%</td>
<td>F</td>
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</tbody>
</table>

**C. Late Work**

**AT THE INSTRUCTOR’S DISCRETION, LATE WORK MAY BE ACCEPTED. LATE WORK WILL LOSE 10 POINTS FOR EACH CLASS PERIOD LATE.**

**D. Missed Exams**

It is the student’s responsibility to make prior arrangements with the instructor if unable to attend class the day of the test. Make-up exams will not be given, except in special circumstances. If a student is absent for a unit exam and has a valid excuse, he/she will have the option of counting the final exam twice-once for the missed exam and once as the regular final exam score. **Final exam scores will not be used to replace a zero unless one has an authorized excuse. If the student misses two or more exams, the final grade will be an “F”**.

**IV. Instructor’s Policies**

**A. Cheating**

High ethical standards are prerequisites for successful careers and reflect on a person’s character. All graded work must be the student’s own work. Situations involving cheating (giving and receiving answers on test) will be handled according to the [Student Code of Conduct](#) published in the EPCC Catalog (page 51) and EPCC FMA-1 [Student Disciplinary Procedure](#).
B. Attendance--Drops

It is the student's responsibility to attend class as per the schedule. It is also the student's responsibility to withdraw from the course for whatever reason. The instructor assumes no responsibility for student withdrawal from the course or for the completion of student's course work. Course expectations are outlined in this syllabus. Last day to withdraw with a grade of “W” is **Friday, November 12, 2021**.

6. **“I” Grade**

A grade of “I” (incomplete) will be assigned at the discretion of the instructor. To receive an “I” a student must complete 80% of the course with at least a 70% average. The proper forms must be signed by the instructor and the student before they may be submitted to the registrar.

6. **Participation** – Students enrolled are expected to participate as a learning community, by being prepared for class, engaging in group activities, joining class discussions, communicating their understanding of mathematics, and explaining their work to others.

Children and Technology in the Classroom

1. Children will not be allowed in the classroom.

2. Students are required to turn off radios, CD players, beepers, and cell phones during class time.
## CALENDAR FOR MATH 1342*

NOTE: The list which follows reflects approximate times for exams. Specific exam dates will be announced in class at least one week prior to the actual exam date. If you have been absent and the calendar indicates an exam is approaching, it is your responsibility to check regarding a scheduled date.

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Lesson Covered</th>
<th>Section Titles</th>
</tr>
</thead>
</table>
| 1    | Aug. 23 – Aug. 29 | 1.1, 1.2, 1.3  | 1.1- An Overview of Statistics  
1.2- Data Classification  
1.3- Data Collection and Experimental Design |
| 2    | Aug. 30 – Sept. 5 | 2.1, 2.2, 2.3  | 2.1- Frequency Distributions and Their graphs  
2.2- More Graphs and Displays  
2.3- Measures of Central Tendency |
| 3    | Sept. 6 – Sept. 12 | 2.4, 2.5       | 2.4- Measures of Variation  
2.5- Measures of Position |
| 5    | Sept. 20 – Sept. 26 | 3.2, 3.3, 3.4, 4.1 | 3.2- Conditional Probability and the Multiplication Rule  
3.3- The Addition Rule  
3.4- Additional Topics in Probability (Optional)  
4.1- Probability Distributions |
| 6    | Sept. 27 – Oct. 3 | 4.2, 4.3 Review, EXAM II 5.1 | 4.2- Binomial Distributions  
4.3- More Discrete Probability Distributions  
5.1- Introduction to Normal Distributions and the Standard Normal Distribution |
| 7    | Oct. 4 – Oct. 10 | 5.2, 5.3, 5.4, 5.5 | 5.2- Normal Distributions: Finding Probabilities  
5.3- Normal Distributions: Finding Values  
5.4- Sampling Distributions and the Central Limit Theorem  
5.5- Normal Approximations to Binomial Distributions |
| 8    | Oct. 11 – Oct. 17 | 6.1, 6.2, 6.3 | 6.1- Confidence Intervals for the Mean (σ known)  
6.2- Confidence Intervals for the Mean (σ unknown)  
6.3- Confidence Intervals for Population Proportions |
| 9    | Oct. 18 – Oct. 24 | 6.4, 7.1, 7.2 | 6.4- Confidence Intervals for Variance and Standard Deviation  
7.1- Introduction to Hypothesis Testing  
7.2- Hypothesis Testing for the Mean (σ known) |
| 10   | Oct. 25 – Oct. 31 | Review, EXAM III, 7.3 | 7.3- Hypothesis Testing for the Mean (σ unknown) |
| 11   | Nov. 1 – Nov. 7 | 7.4, 7.5, 8.1, 8.2 | 7.4- Hypothesis Testing for Proportions  
7.5- Hypothesis Testing for Variance and Standard Deviation  
8.1- Testing the Difference Between Means (Independent Samples, σ1 and σ2 Known)  
8.2- Testing the Difference Between Means (Independent Samples, σ1 and σ2 Unknown) |
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<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Topics</th>
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<tbody>
<tr>
<td>12</td>
<td>Nov. 8 – Nov. 14</td>
<td>8.3, 8.4, 9.1</td>
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<tr>
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<td>November 11th –</td>
<td>8.3- Testing the Difference Between Means (Dependent</td>
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<td></td>
<td>Institutional</td>
<td>Samples)</td>
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<td></td>
<td>Holiday (No Class)</td>
<td>8.4- Testing the Difference Between Proportions</td>
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<td>November 12th –</td>
<td>9.1- Correlation</td>
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<td>Last Day to DROP</td>
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<td>with a “W”</td>
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<tr>
<td>13</td>
<td>Nov. 15 – Nov. 21</td>
<td>9.2, 9.3, 9.4</td>
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<td>9.2- Linear Regression</td>
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<td>9.3- Measures of Regression and Prediction Intervals</td>
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<td>9.4- Multiple Regression</td>
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<td>14</td>
<td>Nov. 22 – Nov. 28</td>
<td>EXAM IV, 10.1, 10.2, 10.3</td>
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<td>November 25th &amp;</td>
<td>10.1- Goodness-of-Fit Test</td>
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<td>26th – Institutional</td>
<td>10.2- Independence</td>
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<td>Holiday (No Class)</td>
<td>10.3- Comparing Two Variances</td>
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<td>15</td>
<td>Nov. 29 – Dec. 5</td>
<td>10.4, Final Exam Review</td>
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<td>10.4- Analysis of Variance</td>
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<td>16</td>
<td>Dec. 6 – Dec. 10</td>
<td>FINAL EXAM</td>
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The date of the final exam for this course is: ________________________________