Course Description

Elementary Statistics provides the basic principles and issues relevant to the understanding of data sources and research. Students gain an overview of the basic concepts of statistics by exploring the world of descriptive statistics, probability, and inferential statistics.

Course Textbook


Course Learning Objectives

Upon completion of this course, students should be able to:

1. Define statistics and identify its scope and limitations.
2. Describe and apply the basic concepts in statistics.
3. Compute the measures of location and measures of dispersion and interpret it for descriptive statistics.
4. Represent the statistical data in different forms, and interpret the different representations.
5. Perform linear regression and correlation analysis.
6. Describe the basic concepts of probability.
7. Describe and apply the discrete and continuous distributions of probability.
8. Construct a hypothesis on one and two samples and perform statistical inference of the same.

Credits

Upon completion of this course, the students will earn three (3) hours of college credit.

Course Structure

The course is divided into eight units. The purpose of the course unit is to create an integrative body of knowledge. Each course unit contains the following activities designed to enhance your understanding of the subject matter.

1. The Unit Lesson highlights, summarizes, and alerts students to areas of importance within selected readings.
2. The Unit Learning Objectives will help students identify how learning will be demonstrated, supported and evaluated.
3. The Required and Supplemental Reading Assignments may include textbook readings, supplemental books, professional journals, and Internet sites.
4. Supplemental Learning Activities can help you succeed in this course. Specific information regarding these activities, along with the activities themselves, can be found in the Unit Study Guides.
5. Information and specifications regarding Discussion Board questions are provided in the Course Policies section.
6. Students are required to take Unit Assessments at the completion of units I-VII. These questions reflect all of the material covered in each unit.
Communication Forums

These are non-graded discussion forums that allow you to communicate with your professor and other students. Participation in these discussion forums is encouraged, but not required. You can access these forums with the buttons in the Course Menu. Instructions for subscribing/unsubscribing to these forums are provided below.

Click here for instructions on how to subscribe/unsubscribe and post to the Communication Forums.

Ask the Professor

This communication forum provides you with an opportunity to ask your professor general or course content questions. Questions may focus on Blackboard locations of online course components, textbook or course content elaboration, additional guidance on assessment requirements, or general advice from other students.

Questions that are specific in nature, such as inquiries regarding assessment/assignment grades or personal accommodation requests, are NOT to be posted on this forum. If you have questions, comments, or concerns of a non-public nature, please feel free to email your professor. Responses to your post will be addressed or emailed by the professor within 48 hours.

Before posting, please ensure that you have read all relevant course documentation, including the syllabus, assessment/assignment instructions, faculty feedback, and other important information.

Student Break Room

This communication forum allows for casual conversation with your classmates. Communication on this forum should always maintain a standard of appropriateness and respect for your fellow classmates. This forum should NOT be used to share assessment answers.

Final Exam Guidelines

Proctored Final Exams are taken online. Final Exams are to be administered to students by an approved proctor on a date that is mutually convenient. The student is responsible for selecting a qualified proctor that must be approved by the College. To view a list of acceptable proctor qualifications, see the Proctor Agreement form. The Proctor Agreement form is located in the Online Forms, Courses page of the myWaldorf Student Portal.

To request your proctored final exam and/or review the complete Examination Proctor Policy and Proctor Agreement, submit the Request, go to the Request to take Final Exam Online (Online Exam) form. The Request to take Final Exam Online (Online Exam) form is located in the Online Forms, Courses page of the myWaldorf Student Portal.

Reminder: The Final Exam is due by Tuesday, 11:59 p.m. (Central Time) of Unit VIII. Any student who does not take the Final Exam by the end of the term will automatically fail the entire course.

Grading

Discussion Board (8 @ 1%) = 8%
MyMathLab Homework Assignments (8 @ 2%) = 16%
Unit Assessments (7 @ 7%) = 49%
Final Exam = 27%
Total = 100%

Course Schedule/Checklist (PLEASE PRINT)

The following pages contain a printable Course Schedule to assist you through this course. By following this schedule, you will be assured that you will complete the course within the time allotted.
# Course Schedule

By following this schedule, you will be assured that you will complete the course within the time allotted. Please keep this schedule for reference as you progress through your course.

## Unit I  
**Data Collection, Organizing and Summarizing Data**

| Review:  
| Unit Study Guide  
| Unit Learning Activities  |
| Read:  
| Chapter 1: Data Collection  
| Chapter 2: Organizing and Summarizing Data:  |
| Discuss:  
| Discussion Board Response: Submit your response to the Discussion Board question by Saturday, 11:59 p.m. (Central Time)  
| Discussion Board Comment: Comment on another student’s Discussion Board response by Tuesday, 11:59 p.m. (Central Time)  |
| Submit:  
| MyMathLab Homework by Tuesday, 11:59 p.m. (Central Time)  
| Assessment by Tuesday, 11:59 p.m. (Central Time)  |

Notes/Goals:

## Unit II  
**Numerically Summarizing Data & Describing the Relation between Two Variables**

| Review:  
| Unit Study Guide  
| Unit Learning Activities  |
| Read:  
| Chapter 3: Numerically Summarizing Data  
| Chapter 4: Describing the Relation between Two Variables  |
| Discuss:  
| Discussion Board Response: Submit your response to the Discussion Board question by Saturday, 11:59 p.m. (Central Time)  
| Discussion Board Comment: Comment on another student’s Discussion Board response by Tuesday, 11:59 p.m. (Central Time)  |
| Submit:  
| MyMathLab Homework by Tuesday, 11:59 p.m. (Central Time)  
| Assessment by Tuesday, 11:59 p.m. (Central Time)  
| Proctor Approval Form  |

Notes/Goals:

## Unit III  
**Probability**

| Review:  
| Unit Study Guide  
| Unit Learning Activities  |
| Read:  
| Chapter 5: Probability  |
| Discuss:  
| Discussion Board Response: Submit your response to the Discussion Board question by Saturday, 11:59 p.m. (Central Time)  
| Discussion Board Comment: Comment on another student’s Discussion Board response by Tuesday, 11:59 p.m. (Central Time)  |
| Submit:  
| MyMathLab Homework by Tuesday, 11:59 p.m. (Central Time)  
| Assessment by Tuesday, 11:59 p.m. (Central Time)  |

Notes/Goals:
### Unit IV
**Discrete Probability Distributions & The Normal Probability Distribution**

- **Review:**
  - Unit Study Guide
  - Unit Learning Activities

- **Read:**
  - Chapter 6: Discrete Probability Distributions
  - Chapter 7: The Normal Probability Distribution

- **Discuss:**
  - Discussion Board Response: Submit your response to the Discussion Board question by Saturday, 11:59 p.m. (Central Time)
  - Discussion Board Comment: Comment on another student's Discussion Board response by Tuesday, 11:59 p.m. (Central Time)

- **Submit:**
  - MyMathLab Homework by Tuesday, 11:59 p.m. (Central Time)
  - Assessment by Tuesday, 11:59 p.m. (Central Time)

**Notes/Goals:**

### Unit V
**Sampling Distributions & Evaluating the Value of a Parameter Using Confidence Intervals**

- **Review:**
  - Unit Study Guide
  - Unit Learning Activities

- **Read:**
  - Chapter 8: Sampling Distributions
  - Chapter 9: Evaluating the Value of a Parameter Using Confidence Intervals

- **Discuss:**
  - Discussion Board Response: Submit your response to the Discussion Board question by Saturday, 11:59 p.m. (Central Time)
  - Discussion Board Comment: Comment on another student's Discussion Board response by Tuesday, 11:59 p.m. (Central Time)

- **Submit:**
  - MyMathLab Homework by Tuesday, 11:59 p.m. (Central Time)
  - Assessment by Tuesday, 11:59 p.m. (Central Time)

**Notes/Goals:**

### Unit VI
**Hypothesis Tests Regarding a Parameter**

- **Review:**
  - Unit Study Guide
  - Unit Learning Activities

- **Read:**
  - Chapter 10: Hypothesis Tests Regarding a Parameter

- **Discuss:**
  - Discussion Board Response: Submit your response to the Discussion Board question by Saturday, 11:59 p.m. (Central Time)
  - Discussion Board Comment: Comment on another student's Discussion Board response by Tuesday, 11:59 p.m. (Central Time)

- **Submit:**
  - MyMathLab Homework by Tuesday, 11:59 p.m. (Central Time)
  - Assessment by Tuesday, 11:59 p.m. (Central Time)

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| **Unit VIII**                  |                 |
| **Comprehensive Final Exam Review Homework & Comprehensive Final Exam** |                 |
| **Review:**                    |                 |
| □ Unit Study Guide             |                 |
| □ Unit Learning Activities     |                 |
| **Read:**                      |                 |
| □ **Review Chapters 1-12**    |                 |
| **Discuss:**                   |                 |
| □ **Discussion Board Response:** Submit your response to the Discussion Board question by Saturday, 11:59 p.m. (Central Time) |                 |
| □ **Discussion Board Comment:** Comment on another student’s Discussion Board response by Tuesday, 11:59 p.m. (Central Time) |                 |
| **Submit:**                    |                 |
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| □ **Final Exam** by Tuesday, 11:59 p.m. (Central Time) |                 |
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