



COURSE OUTLINE: ABSE 122

N Non-Credit

COURSE ID 010434

APRIL 2019

COURSE DISCIPLINE: ABSE
COURSE NUMBER : 122
COURSE TITLE (FULL) : Basic Statistics Review
COURSE TITLE (SHORT) : Basic Statistics Review

CATALOG DESCRIPTION

ABSE 122 reviews the basic concepts of data analysis and statistical computing. Topics include weighted averages, distribution of data, interpretation of data graphs, counting strategies and probability. Emphasis is placed on developing basic statistics vocabulary and contextualized problem solving. Note: This is a noncredit course with open-entry and open-exit. Laboratory 20 hours.

Total Lecture Units:0.00

Total Laboratory Units: 0.00

Total Course Units: 0.00

Total Lecture Hours:0.00

Total Laboratory Hours: 20.00

Total Laboratory Hours To Be Arranged: 0.00

Total Faculty Contact Hours: 20.00

Total Student Contact Hours: 20.00

Recommended Preparation: ESL 30 or equivalent.



ENTRY STANDARDS

	Subject	Number	Title	Description	Include
1				Perform basic arithmetic operations (addition, subtraction, multiplication, division);	Yes
2				converse at a functional level adequate for everyday use on the campus and in the community;	Yes
3				decode 2,500-word reading passages and respond to inference and recall questions.	Yes

EXIT STANDARDS

- 1 Display and analyze data statistically;
- 2 solve problems involving data, statistics, and probability;
- 3 use tree diagrams, tables, organized lists, basic combinations, and area models to compute probabilities and to solve problems;
- 4 develop fluency in statistics vocabulary.

STUDENT LEARNING OUTCOMES

- 1 Compare results of simulations with predicted probabilities
- 2 Select an appropriate graphical representation for a set of data and use appropriate statistics to communicate information about the data
- 3 Apply statistical principals and techniques in specific career pathways

COURSE CONTENT WITH INSTRUCTIONAL HOURS



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	Description	Lecture	Lab	Total Hours
1	How to “read” Statistics, and Types of Graphs <ul style="list-style-type: none"> • Data collection • Purpose and use of various graphs and tables • Bar graphs, histograms, circle graphs, line graphs, etc. 	0	2	2
2	Measures of center and spread <ul style="list-style-type: none"> • Mean • Median • Mode • Range 	0	3	3
3	Values and weighted averages <ul style="list-style-type: none"> • Calculating for missing data • Weighted ranking • Weighted values using percentages 	0	3	3
4	Box plots and distribution of data <ul style="list-style-type: none"> • Measures of center and spread using boxplots • Distribution of data using histograms 	0	2	2
5	Predictions and correlations <ul style="list-style-type: none"> • Interpreting data • Using scatter plots • Negative and positive linear correlations 	0	2	2
6	Counting strategies <ul style="list-style-type: none"> • Calculating sequences of events • Basic Factorials 	0	2	2
7	Combinations and permutations <ul style="list-style-type: none"> • Differences between combinations and permutations • Applying and calculating combinations • Applying and calculating permutations 	0	3	3
8	Probability <ul style="list-style-type: none"> • Simple probability • Theoretical and Experimental probability • Compound probability 	0	3	3
				20



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OUT OF CLASS ASSIGNMENTS

- 1 Practice applications

METHODS OF EVALUATION

- 1 Class participation
- 2 Quizzes
- 3 Exit Assessment

METHODS OF INSTRUCTION

- Lecture
- Laboratory
- Studio
- Discussion
- Multimedia
- Tutorial
- Independent Study
- Collaboratory Learning
- Demonstration
- Field Activities (Trips)
- Guest Speakers
- Presentations

TEXTBOOKS

Title	Type	Publisher	Edition	Medium	Author	ISBN	Date
Math Sense 3: Focus on Analysis	Supplemental		1		Hoyt, Cathy Fillmore	978-1-56420-693-0	2015