

BIOL 305: Biostatistics

Section 2, Fall 2024: 3 credits

Dept. of Biology, College of Arts and Sciences, University of Nebraska at Kearney

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|----------------------|--------------------------|----------------|--|
| Classroom: | BHS NUM | Time: | DAYS OF WK.: 13:25–14:15 |
| Instructor: | Mr. John Ross | Email: | anonymous@unk.edu |
| Office hours: | DAYS OF WK.: 08:00–09:00 | Office: | BHS ??? |

Last updated: 9th January 2025

Lecture meeting times and location: DAYS OF WEEK: 13:25–14:15 (1:25 PM–2:15 PM) in BHS NUM (Full Building Name).

Instructor contact information:

Mr. John Ross, Position Title, located in BHS ???.

Office hours are on DAYS OF WK. from 08:00–09:00.

Contact: (555)-555-5555, anonymous@unk.edu, and through [Canvas](#).

Course website: Course information is available via [Canvas](#). Please check this site regularly. Mobile apps for Canvas are available for iOS and Android.

Course description: Type your description here.

Prerequisites: Prereqs here.

Instructional method: Instructional method and information here.

Student learning outcomes: By the end of this course, students should be able to:

- 1) Do the things from this bulleted list.
- 2) Like this second item.

Course Requirements: Course requirements.

Mr. Ross's attendance policy: Your attendance policy.

Missed assignments, quizzes, exams, and make-up policy: Your missing assignment policy.

Required materials: Required materials here, like the example books (see figures [1](#) and [2](#)).

Technology: Tech requirements.

Technical support:

LoperTECH Service Desk: Phone: [308-865-8363](tel:308-865-8363); Email: support@nebraska.edu

If you are having problems or technical issues with [Canvas](#), please contact ITS. Note that [Canvas](#) is most compatible with [Firefox](#) or [Chrome](#). If you are using Edge or Safari and having issues, please try one of the aforementioned browsers before reaching out to tech support.

Grading policy: Policy and grade breakdown here. See below for a tabular example.

Assigning letter grades at the end of the semester: Grades in this class will be assigned according to the standard UNK scoring system described below. Only by attaining these percentages can you be assured of receiving a desired grade.



Figure 1: *Experimental Design for the Life Sciences, 4th ed.* ISBN: 978-0-19-871735-5

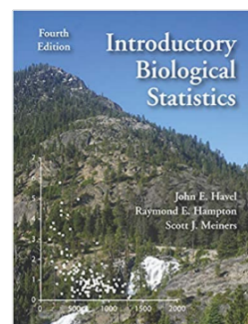


Figure 2: *Introductory Biological Statistics, 4th ed.* ISBN: 978-1478638186.

| | | |
|-------------|-----------|------------|
| A+: 97–100% | A: 94–96% | A-: 90–93% |
| B+: 87–89% | B: 84–86% | B-: 80–83% |
| C+: 77–79% | C: 74–76% | C-: 70–73% |
| D+: 67–69% | D: 64–66% | D-: 60–63% |
| | F: < 60% | |

Please note: Grades will be rounded to the nearest whole percent. Thus, if your final grade is within 0.5% of the next highest grade, your grade will be rounded up (e.g., an 89.50% will be considered an “A-”). This is the definitive cutoff for rounding grades. There will be NO exceptions to this policy.

Mr. Ross’s policy on plagiarism and academic dishonesty: Plagiarism policy here.

The learning commons: Learning Commons services are available in person and on Zoom for all online and on-campus UNK students. To request an appointment for subject tutoring, writing tutoring, success coaching, or foreign language support, please submit an [Appointment Request Form on the Learning Commons website](#), call the Learning Commons Welcome Desk at 308-865-8905, or stop by the Welcome Desk in person on the second floor of the Calvin T. Ryan Library. To submit a draft of your writing for a tutor to review, go to the [Writing Center webpage](#)).

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Please see university specific policies on the following page.

University policies

Example: This will insert a separate section in which you can put university policies. This allows the same insert to be used in multiple syllabi and to shared among faculty.

Please see calendar on following pages.

Tentative course calendar

Below is an example schedule from a course at UNK. Note that the dates will automatically update for the semester after the first Monday is noted in the header of the LaTeX document. Please note that this schedule may be subject to change. Assigned readings are noted for each topic. (Key: L = Lecture; **R&C** = **Ruxton and Colegrave 2016 chapter number**; **HHM** = **Havel, Hampton and Meiners 2019 chapter number**); **HW#** = Homework, Chapter # in HHM when applicable.

| Week | Date | Topic |
|------|----------------|---|
| 1 | 26th August | L1: Course introduction & Scientific Method (R&C: 1) |
| | 28th August | L2.1: Elements of good study design (R&C: 2) |
| | 30th August | L2.2: Elements of good study design (R&C: 2) |
| 2 | 2nd September | Labor Day / Cherokee National Holiday (No class) |
| | 4th September | L3.1: Introduction to study design |
| | 6th September | L3.2: Measurements |
| 3 | 9th September | L4.1: Elements of good study design (R&C: 3–5) |
| | 11th September | L4.2: Elements of good study design (R&C: 3–5) |
| | 13th September | L5.1: Practicing the art of study design (HW: Exam 1 practice) |
| 4 | 16th September | Exam 1 review; Exam 1 assigned |
| | 18th September | Exam 1 Q&A; Exam 1 due @ 6 PM |
| | 20th September | L6.1: Data measurement & management |
| 5 | 23rd September | L6.2: Data measurement & management |
| | 25th September | Introduction to programming (COMPUTER REQUIRED) |
| | 27th September | L7.1: Central tendency & dispersion |
| 6 | 30th September | L7.2: Central tendency & dispersion |
| | 2nd October | Review and homework day |
| | 4th October | L9.1: Normality & hypothesis testing |

| Week | Date | Topic |
|------|---------------|--|
| 7 | 7th October | L9.2: Normality & hypothesis testing (z score practice) |
| | 9th October | L9.3: Normality and hypothesis testing |
| | 11th October | L9.4: Normality & hypothesis testing, Exam 2 review |
| 8 | 14th October | Exam review, Exam 2 assigned |
| | 16th October | Exam 2 Q&A, Exam 2 due @ 6 PM |
| | 18th October | L10.1: Binomial distribution |
| 9 | 21st October | No class (Fall Break) |
| | 23rd October | No class (Fall Break) |
| | 25th October | L10.2: Binomial distributions |
| 10 | 28th October | L11.2: Testing single populations |
| | 30th October | Homework & review day |
| | 1st November | L12.1: Two population means testing |
| 11 | 4th November | L12.2: Two population means testing |
| | 6th November | L12.3: Two population means testing |
| | 8th November | L12.4: Two population means testing |
| 12 | 11th November | Homework & review day |
| | 13th November | L13.1: Multi-pop means testing |
| | 15th November | L13.2: Multi-pop means testing |
| 13 | 18th November | L13.3 Multi pop means testing |
| | 20th November | Homework & review day |
| | 22nd November | L14: Two-way ANOVA |
| 14 | 25th November | Homework & review day |

| Week | Date | Topic |
|------|---------------|--|
| | 27th November | No class (Thanksgiving) |
| | 29th November | No class (Thanksgiving) |
| 15 | 2nd December | L15.1: Correlation and regression |
| | 4th December | L15.2 Correlation and Regression |
| | 6th December | 15.3: Correlation and Regression |
| 16 | 9th December | Homework & review |
| | 11th December | Pick the test! Final exam review assigned |
| | 13th December | Final exam study session |
| 17 | 16th December | No class; Final exam assigned |
| | 18th December | Final exam class period, Final exam due @ 6 PM |
| | 20th December | No class |

Note: This schedule is subject to change pending events during the semester.