

Spring courses

Courses for MS students

From class #1:

| Year | Semester | Activities |
|------|----------|--|
| 1 | Fall | STAT 810: Alpha Seminar STAT 821: Statistical Methods I STAT 850: Computing Tools for Statisticians STAT 882: Mathematical Statistics I STAT 892*: TA Prep |
| | Spring | STAT 822: Statistical Methods II STAT 883: Mathematical Statistics II Elective Form Supervisory Committee Submit Memorandum of Courses |
| 2 | Fall | STAT 823: Statistical Methods III STAT 825: Principles of Statistical Consulting and Interdisciplinary Collaboration Elective |
| | Spring | Electives MS Comprehensive Exam |

*Required course for TAs only

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– “Kernel estimation for density functions, kernel estimation for regression (local linear regression), and probably some simple bootstrap theories”

– Possibly rank-based tests

- STAT 875

– <http://www.chrisbilder.com/stat875/index2.html>

– Blended learning teaching approach

– Application and R aspects of categorical data analysis, differentiate it from STAT 821-2

– Mix of statistics and non-statistics majors

– *Analysis of Categorical Data with R* textbook; website: <http://www.chrisbilder.com/categorical>

- STAT 892

– 2 credit hours

– Some non-stat topics from data science

– Seminar given earlier in the semester on it

Potential courses from the Department of Statistics:

STAT 843 - Next-Generation Sequencing and Systems Biology

| Class | Section | Days & Times | Room | Instructor | Meeting Dates | Status |
|-------|--------------------|---------------------|----------------|----------------|-------------------------|--------|
| 1857 | 001-LEC Regular | Tu 12:30PM - 1:45PM | Avery Hall 117 | Istvan Ladunga | 01/09/2017 - 05/05/2017 | ● |

| Class | Section | Days & Times | Room | Instructor | Meeting Dates | Status |
|-------|--------------------|--------------------|----------------|------------|-------------------------|--------|
| 25965 | 002-LEC Regular | Th 2:30PM - 3:45PM | Avery Hall 117 | Staff | 01/09/2017 - 05/05/2017 | ● |

STAT 874 - Nonparametric Statistics

| Class | Section | Days & Times | Room | Instructor | Meeting Dates | Status |
|-------|--------------------|--------------------------|------|------------|-------------------------|--------|
| 17565 | 001-LEC Regular | MoWeFr 10:00AM - 10:50AM | TBA | Yumou Qiu | 01/09/2017 - 05/05/2017 | ● |

STAT 875 - Categorical Data Analysis

| Class | Section | Days & Times | Room | Instructor | Meeting Dates | Status |
|-------|--------------------|----------------------|---------------|----------------------|-------------------------|--------|
| 2105 | 003-LEC Regular | TuTh 2:30PM - 3:45PM | Keim Hall 214 | Christopher R Bilder | 01/09/2017 - 05/05/2017 | ● |

STAT 892 - Topics in Statistics and Probability

| Class | Section | Days & Times | Room | Instructor | Meeting Dates | Status |
|-------|--------------------|----------------------|----------------|----------------|-------------------------|--------|
| 25950 | 001-LEC Regular | MoWe 1:00PM - 2:00PM | Hardin Hall 49 | Istvan Ladunga | 01/09/2017 - 05/05/2017 | ● |

Topic: Computing for Big Data in Stat

Comments:

- Talk to the instructor about a course you are interested in before registering for it!
- STAT 843
 - http://compbio.unl.edu/courses/syllabus_stat843_102315.pdf
 - Undergraduate cross-listing
 - Heavy emphasis on understanding DNA/RNA
- STAT 874
 - “The course will be theoretically based”
 - Prerequisite: STAT 882

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Courses for PhD students

From class #1:

| Year | Semester | Activities |
|------|----------|---|
| 1 | Fall | STAT 980: Advanced Probability Theory STAT 900-level course Elective Form Supervisory Committee |
| | Spring | STAT 982: Statistical Theory I STAT 983: Statistical Theory II Elective |
| 2 | Fall | STAT 984**: Asymptotics and Applications STAT 900-level course STAT 999: Doctoral Dissertation |
| | Spring | STAT 950: Computational Statistics I STAT 999: Doctoral Dissertation PhD Comprehensive Exam Elective |
| 3 | Fall | STAT 999: Doctoral Dissertation |
| | Spring | STAT 999: Doctoral Dissertation Final Oral Exam |

**Students may substitute STAT 981: Advanced Probability Measures

Potential courses from the Department of Statistics:

- Courses previously discussed
- Some professors allow students to take an 800-level course as STAT 992 provided they complete extra work
- Advanced Experimental Design - Continues STAT 802 and experimental design learned in STAT 821-822

STAT 902 - Advanced Experimental Design

| Class | Section | Days & Times | Room | Instructor | Meeting Dates | Status |
|-------|--------------------|--------------------------|------------------------|-------------------------|----------------------------|--------|
| 17566 | 001-LEC Regular | TuTh 9:30AM - 10:45AM | Animal Science A222 | Kent Millar Eskridge | 01/09/2017 - 05/05/2017 | ● |

- Advanced Statistical Consulting and Interdisciplinary Collaboration - Should have STAT 825 first

Courses from other departments

Talk to your temporary advisor and the instructor prior to registering for a course from another department! Below are some courses that may be o.k. to take:

- Computer Science
 - CSCI 823: Design and Analysis of Algorithms
 - CSCI 970: Pattern Recognition
- Economics
 - ECON 917: Econometrics I (may be too basic)
- Educational Psychology
 - ~~EDPS 941~~: Intermediate Statistics: Experimental Methods (too basic)
 - EDPS 971: Structural Equation Modeling
- Mathematics
 - MATH 828: Principles of Operations Research (undergraduate cross-listing; everyone will have prerequisites)
- Psychology
 - ~~PSYC 851~~: Multivariate Research Design and Data Analysis (STAT 821, 822, 823 will cover these topics)
- Survey Research and Methodology
 - SRAM 921: Total Survey Error (no prerequisites listed)
 - SRAM 922: Randomized and Nonrandomized Research Design (no prerequisites listed)
- UNMC Biostatistics - Official course listing is not available yet; below is the projected listing
 - BIOS 835: Design of Medical Health Studies (online)

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- BIOS 825: Correlated Data Analysis (online) - may have significant overlap with STAT 822
- UNMC Epidemiology - Official course listing is not available yet; below is the projected listing
 - EPI 820: Epidemiology in Public Health (online; may be too basic but prerequisite for many Epi courses)
 - EPI 825: Infectious Disease Epidemiology (Friday 1:00-3:40PM)
- UNO - Course listing is not available yet

UNL course descriptions are available at <https://bulletin.unl.edu/courses>.