**STAT 520: STATISTICAL INFERENCE**

SYLLABUS

SPRING2020//SEC:01//CLASS#:3696//CSULB

PROFESSOR: Dr. Kagba Suaray//Kagba.Suaray@csulb.edu//562.985-4724//FO3-216

LECTURE: T&TH 5:30-6:45 @ LA5-171

OFFICE HOURS: T&TH 4:25-5:25pm or by appointment.

TEXT: **Introduction to Mathematical Statistics 7ed**, by Hogg, McKean & Craig

ISBN: 978-0321795434

We will cover most of Chapters 1-8,11.

Welcome to the foundation of your training as a statistician. This is a math intensive course that highlights the beauty of statistical theory. It illustrates *why* you can justify use of many of the methods you take for granted in other statistics courses. In addition, successful completion of this course is a necessary step for doing well on the Masters comprehensive exam. You may find additional information at

<http://web.csulb.edu/depts/math/?q=node/77>

**GRADING:** Homework Assignments 20%

 Midterms (x2) 50%

 Final 30%

The course will be graded on a curve, and the highest possible cut-offs will be as follows:

A:88%, B:76%, C:64%, D: 52%.

See the schedule below for dates of exams.

Nice resource for review: <http://www.math.utah.edu/~cmiller/classes/FA183070/>

There will be opportunities for extra credit throughout the course.

Stay posted to Beachboard for assignments, a message board, and other course information.

There will be no make-up tests except for medical reasons with a Doctor’s written proof.

If you have a university verified disability, it is your responsibility to inform the instructor in advance of any special consideration that you require for exams.

If you received permission to register for a closed class section, only you can enroll in the course. It is the student’s responsibility to complete the registration process before the dates indicated in the *Schedule of Classes*.

You are expected to be familiar with the *“General Regulations and Procedures”* in the catalog. University drop and withdrawal policies shall be strictly enforced. See

<http://www.csulb.edu/enrollment-services/key-dates-and-deadlines>

**Last day to add: 2/17. Last Day to drop without a “W”: 2/3. Last Day to drop all classes without dean’s signature: 4/17.**

**SCHEDULE**

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| --- | --- | --- |
| **Week** | **Section** | **Topics** |
| 1 | 1.1-1.10 | Introduction |
| 2 | 2.1-6 | Multivariate Distributions |
| 3-5a | 3.1-6 | Special Distributions |
| 5b | **2/20/19** | **MIDTERM I** |
| 6-7 | 5.1-5 | Convergence, Central Limit Theorem |
| 8-10a | 4,5,11 | Frequentist and Bayesian Inference |
| 10b | 6 | Maximum Likelihood Methods |
| 11 | 3/31, 4/2/19 | **SPRING BREAK** |
| 12a | 6 | Maximum Likelihood Methods, ctd |
| 12b | **4/9/19** | **MIDTERM II** |
| 13-14a | 6 | Maximum Likelihood Methods, ctd |
| 14b-16a | 7,8 | Sufficiency and Applications |
| 16b |  | Special Topics///Review |
| 17b | **Thursday 5/14/19 @ 5-7pm** | **FINAL** |

*-The CNSM is committed to providing a safe and positive learning environment and has established a zero-tolerance policy for any sexual/gender-based misconduct, including, but not limited to sexual harassment, assault, relationship violence or stalking for all faculty, staff, and students.*

*-The following entities at CSULB have been established to provide support and assistance for victims of sexual harassment and assault:  Title IX Office*[*http://web.csulb.edu/divisions/students/titleix/titleix\_reporting.html*](http://web.csulb.edu/divisions/students/titleix/titleix_reporting.html)*, CSULB University Police Department*[*https://www.csulb.edu/university-police/title-ix*](https://www.csulb.edu/university-police/title-ix)*, The Women's & Gender Equity Center,*[*http://web.csulb.edu/divisions/students/wrc/sexual\_assault/*](http://web.csulb.edu/divisions/students/wrc/sexual_assault/)*, and the Counseling & Psychological Services (CAPS) Office*[*http://web.csulb.edu/divisions/students/caps/*](http://web.csulb.edu/divisions/students/caps/)*, and Student Health Services:*[*http://web.csulb.edu/divisions/students/shs/sexual\_assault.htm*](http://web.csulb.edu/divisions/students/shs/sexual_assault.htm)*. For more information regarding CSULB’s policies on sexual misconduct and discrimination:*[*http://www.csulb.edu/titleix*](http://www.csulb.edu/titleix)*.*

*-As members of The Beach community, we practice tolerance and denounce hate and prejudice. Our classroom will strive to be a place of mutual respect where the focus is on learning and student success.*