Last Updated: Vankeerbergen, Bernadette 6201 - Status: PENDING

01/02/2021

Chantal

Term Information

Effective Term Summer 2021 **Previous Value** Summer 2012

Course Change Information

What change is being proposed? (If more than one, what changes are being proposed?)

To add a 100% DL option.

What is the rationale for the proposed change(s)?

To give flexibility to offer the course online.

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

Is approval of the requrest contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

General Information

Course Bulletin Listing/Subject Area **Statistics**

Fiscal Unit/Academic Org Statistics - D0694 College/Academic Group Arts and Sciences

Level/Career Graduate Course Number/Catalog 6201

Mathematical Statistics Course Title

Transcript Abbreviation Math Stat

Probability, random variables, expectation, moment generating functions, discrete and continuous distributions, limit theorems, maximum likelihood and Bayesian estimation, confidence intervals, hypothesis tests, Neyman-Pearson lemma, t and F tests. **Course Description**

Semester Credit Hours/Units Fixed: 4

Offering Information

Length Of Course 14 Week, 12 Week, 8 Week, 7 Week, 6 Week

Flexibly Scheduled Course Never Does any section of this course have a distance Yes

education component?

Is any section of the course offered 100% at a distance

Previous Value No

Grading Basis Letter Grade

Repeatable Nο **Course Components** Lecture **Grade Roster Component** Lecture Credit Available by Exam No **Admission Condition Course** No Off Campus Never **Campus of Offering** Columbus

Last Updated: Vankeerbergen,Bernadette Chantal 01/02/2021

6201 - Status: PENDING

Prerequisites and Exclusions

Prerequisites/Corequisites Prereq: Math 2153 or equiv, or permission of instructor.

Previous Value Prereg: Math 2153 (254) or equiv, or permission of instructor.

Exclusions Not open to students with credit for 6301 or 6801.

Previous Value Not open to students with credit for 6301 (610) or 6801 (620).

Electronically Enforced No

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code27.0501Subsidy LevelDoctoral CourseIntended RankMasters, Doctoral

Previous Value Junior, Senior, Masters, Doctoral

Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors

The course is an elective (for this or other units) or is a service course for other units

Course Details

Course goals or learning objectives/outcomes

- Work with and derive univariate and multivariate distributions.
- Derive distributions of transformed random variables.
- Formulate, construct and interpret confidence intervals about parameters in a statistical model.
- Formulate statistical hypotheses, construct appropriate hypotheses tests and interpret results.

Previous Value

Content Topic List

- Probability
- Random variables
- Expectation
- Moment generating functions
- Discrete and continuous distributions
- Limit theorems
- Maximum likelihood and Bayesian estimation
- Confidence intervals
- Hypothesis tests
- Neyman-Pearson lemma
- T and F tests.

Sought Concurrence

No

COURSE CHANGE REQUEST

6201 - Status: PENDING

Last Updated: Vankeerbergen,Bernadette Chantal 01/02/2021

Attachments

● 6201 Online Syllabus.docx: Online syllabus

(Syllabus. Owner: Craigmile, Peter F)

• 6201 In-Person Syllabus.docx: In-person syllabus

(Syllabus. Owner: Craigmile, Peter F)

• Stat 6201_DL.docx: ASCTech DL review

(Other Supporting Documentation. Owner: Craigmile,Peter F)

Comments

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Craigmile,Peter F	12/07/2020 09:37 AM	Submitted for Approval
Approved	Craigmile,Peter F	12/07/2020 09:46 AM	Unit Approval
Approved	Haddad, Deborah Moore	12/07/2020 10:30 AM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Oldroyd,Shelby Quinn Vankeerbergen,Bernadet te Chantal	12/07/2020 10:30 AM	ASCCAO Approval



COLLEGE OF ARTS AND SCIENCES

SYLLABUS: STAT 6201 – DISTANCE LEARNING MATHEMATICAL STATISTICS AUTUMN 2021

Course overview

Instructor

Instructor: TBD Email address: TBD

Office hours: Virtual Hours via Carmen Zoom. Days and times TBD.

There is no class on October 15 (Autumn break)

Office Location: TBD

Grader or Teaching Assistant

Will be announced later.

Course description

Statistics 6201 offers an introduction to some of the core concepts from probability theory and statistical inference. Topics covered include probability, random variables, expectation, moment generating functions, discrete and continuous distributions, limit theorems, maximum likelihood and Bayesian estimation, confidence intervals, hypothesis tests, Neyman-Pearson lemma, t and F tests.

Course learning outcomes

By the end of this course, students should successfully be able to:

- Work with and derive univariate and multivariate distributions.
- Derive distributions of transformed random variables.

- Formulate, construct and interpret confidence intervals about parameters in a statistical model.
- Formulate statistical hypotheses, construct appropriate hypotheses tests and interpret results.

Course materials

Required textbook:

Probability and statistics by Morris H. DeGroot and Mark H. Schervish (Pearson, ISBN: 978-0321500465)

Course technology

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at https://ocio.osu.edu/help/hours, and support for urgent issues is available 24x7.

• Self-Service and Chat support: http://ocio.osu.edu/selfservice

Phone: 614-688-HELP (4357)

Email: 8help@osu.eduTDD: 614-688-8743

Baseline technical skills necessary for online courses

- Basic computer and web-browsing skills
- Navigating Carmen

Technology skills necessary for this specific course

- CarmenZoom
- Recording a slide presentation with audio narration
- Recording, editing, and uploading video

Necessary equipment

- Computer: current Mac (OS X) or PC (Windows 10+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed
- Microphone: built-in laptop or tablet mic or external microphone

Necessary software

- On occasion, I may use the statistical software package called R (The R Project for Statistical Computing; http://www.r-project.org/) to illustrate certain aspects. However, this software is not a requirement for this class. If you wish to download it, here is the information.
 - You can download R for Windows, Mac, and Linux, from the CRAN archive at https://cran.r-project.org.
 - An in-depth introduction to R is available at http://cran.r-project.org/doc/manuals/R-intro.pdf
 - Hands-on tutorials are available in the Swirl system, which you can learn about at http://swirlstats.com/. In particular, "R Programming: The basics of programming in R" is an appropriate first tutorial for students who have never used R.
- An easier to use interface to R is available in the software package RStudio. This package
 is available for Windows, Mac, and Linux and can be downloaded for free from
 http://rstudio.org. Note that RStudio requires R to be installed.
- Microsoft Office 365 ProPlus All Ohio State students are now eligible for free Microsoft
 Office 365 ProPlus through Microsoft's Student Advantage program. Each student can
 install Office on five PCs or Macs, five tablets (Windows, iPad® and Android™) and five
 phones.
 - Students are able to access Word, Excel, PowerPoint, Outlook and other programs, depending on platform. Users will also receive 1 TB of OneDrive for Business storage.
 - Office 365 is installed within your BuckeyeMail account. Full instructions for downloading and installation can be found https://ocio.osu.edu/kb04733.

Course delivery

The class is scheduled to meet on MWF from 8:00am - 09:15am. The course will be taught fully online, and no in-person meetings will take place.

Each week, live lectures will be delivered through CarmenZoom at the scheduled class times (see above). These lectures will be recorded and posted on the class website soon after. Links for the Zoom meetings will be posted well in advance on Carmen.

On occasion, instructional videos may be posted to the class website. Such videos will replace a live Zoom lecture and will contain new course material and worked examples. You will be responsible for watching the videos, studying the new material and working through the examples presented in the videos or assigned as an exercise.

The vast majority of the course can be completed asynchronously, meaning that you will be able to study materials and work on assessments according to your own schedule. Throughout the

course, the balance between synchronous (live lectures) and asynchronous (posted videos) may change, based on the specific topic we are covering, or other factors.

Weekly office hours will be held via CarmenZoom, at the times given above (see Instructor section).

Grading and faculty response

Grades

Assignment or category	Percentage
Homework	10
Quizzes	10
Midterm 1, Date TBD	25
Midterm 2, Date TBD	25
Final Exam, Date TBD	30
Total	100

Assignment information

Homework: There will be weekly homework assignments posted on the course website. Homework is due once per week, with dates and times provided as needed.

Quizzes: There will be weekly quizzes. These will be administered online, through Carmen. There will be a sufficiently large time window, but once you begin taking the quiz there will be a time limit for you to complete it.

Exams: There will be two midterm exams and one final exam. All exams will be delivered remotely, via Carmen. The final exam will take place at the time and date established by the University. Information about the exams will be posted well in advance through the course website.

Late assignments

Generally late assignments are not accepted and written documentation is required for missed assignments. If you are unable to complete an assignment on time, please get in touch with me as soon as possible so we can discuss your situation.

Grading scale

93–100: A 90–92.9: A-87–89.9: B+ 83–86.9: B 80–82.9: B-77–79.9: C+ 73–76.9: C 70–72.9: C-67–69.9: D+ 60–66.9: D Below 60: E

Faculty feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-HELP** at any time if you have a technical problem.)

Grading and feedback

For large weekly assignments, you can generally expect feedback within 7 days.

E-mail

I will reply to e-mails within 24 hours on school days.

Discussion board

I will check and reply to messages in the discussion boards every 24 hours on school days.

Attendance, participation, and discussions

Student participation requirements

Because this is a distance-education course, your attendance is based on your online activity and participation. The following is a summary of everyone's expected participation:

Logging in: AT LEAST ONCE PER WEEK
 Be sure you are logging in to the course in Carmen each week, including weeks with

holidays or weeks with minimal online course activity. (During most weeks you will probably log in many times.) If you have a situation that might cause you to miss an entire week of class, discuss it with me as soon as possible.

- Office hours and live sessions: OPTIONAL OR FLEXIBLE
 All live, scheduled events for the course, including my office hours, are optional. For live presentations, I will provide a recording that you can watch later. If you are required to discuss an assignment with me, please contact me at the beginning of the week if you need a time outside my scheduled office hours.
- Participating in discussion forums: SEVERAL TIMES PER WEEK
 As participation, each week you can expect to post several times as part of our substantive class discussion on the week's topics.

Discussion and communication guidelines

The following are my expectations for how we should communicate as a class. Above all, please remember to be respectful and thoughtful.

- Writing style: While there is no need to participate in class discussions as if you were writing a research paper, you should remember to write using good grammar, spelling, and punctuation. Informality (including an occasional emoticon) is fine for non-academic topics.
- **Tone and civility**: Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably. Remember that sarcasm doesn't always come across online.
- Citing your sources: When we have academic discussions, please cite your sources to back up what you say. (For the textbook or other course materials, list at least the title and page numbers. For online sources, include a link.)
- **Backing up your work**: Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion.

Other course policies

Health and safety

The Ohio State University Wexner Medical Center's Cornavirus Outbreak site (https://wexnermedical.osu.edu/features/coronavirus) includes the latest information about COVID-19 as well as guidance for students, faculty and staff.

I expect that you will read and follow the guidelines and requirements for campus safety, which are available at https://safeandhealthy.osu.edu.

Student academic services

Student academic services offered on the OSU main campus http://advising.osu.edu/welcome.shtml.

Student support services

Student support services offered on the OSU main campus http://ssc.osu.edu.

Academic integrity policy

Policies for this online course

- Quizzes and exams: You must complete the midterm and final exams yourself, without any external help or communication. Weekly quizzes are included as self-checks without points attached.
- Written assignments: Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work.
- Reusing past work: In general, you are prohibited in university courses from turning in
 work from a past class to your current class, even if you modify it. If you want to build
 on past research or revisit a topic you've explored in previous courses, please discuss
 the situation with me.
- Falsifying research or results: All research you will conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.
- Collaboration and informal peer-review: The course includes many opportunities for
 formal collaboration with your classmates. While study groups and peer-review of major
 written projects is encouraged, remember that comparing answers on a quiz or
 assignment is not permitted. If you're unsure about a particular situation, please feel
 free just to ask ahead of time.

Ohio State's academic integrity policy

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

Copyright disclaimer

The materials used in connection with this course may be subject to copyright protection and are only for the use of students officially enrolled in the course for the educational purposes associated with the course. Copyright law must be considered before copying, retaining, or disseminating materials outside of the course.

Statement on Title IX

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at http://titleix.osu.edu or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu

Accessibility accommodations for students with disabilities

The University strives to make all learning experiences as accessible as possible. If you anticipate or experience academic barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Accessibility of course technology

This online course requires use of Carmen (Ohio State's learning management system) and other online communication and multimedia tools. If you need additional services to use these technologies, please request accommodations with your instructor.

- Carmen (Canvas) accessibility
- Streaming audio and video
- Synchronous course tools

Your mental health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614- 292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273- TALK or at suicidepreventionlifeline.org

Disclaimer

This syllabus should be taken as a fairly reliable guide for the course content. However, you cannot claim any rights from it and in particular we reserve the right to change due dates or the methods of grading and/or assessment if necessary. Any changes will be communicated to you through official course announcements.

Course schedule (tentative)

Week	Dates	Topics	
1	8/23/21 – 8/29/21	Review of probability	
2	8/30/21 – 9/5/21	Sample spaces, events, conditional probability	
3	9/6/21 – 9/12/21	Independence, Bayes theorem	
4	9/13/21 – 9/19/21	Random variables, continuous and discrete distributions	
5	9/21/21 – 9/26/21	Multivariate distributions	
6	9/27/21 – 10/3/21	Functions of random variables	
7	10/4/21 – 10/10/21	Expectation, variance, moments, quantiles	
8	10/11/21 – 10/17/21	Covariance, correlation	
9	10/18/21 – 10/24/21	Conditional expectation	
10	10/25/21 – 10/31/21	Discrete distributions	
11	11/1/21 – 11/7/21	Continuous distributions	
12	11/8/21 – 11/14/21	Large sample theory	
13	11/15/21 – 11/21/21	Maximum likelihood estimation	
14	11/22/21 – 11/28/21	Bayesian estimation	
15	11/29/21 – 12/3/21	Hypothesis testing	
16	12/6/21 – 12/8/21	Hypothesis testing	



COLLEGE OF ARTS AND SCIENCES

SYLLABUS: STAT 6201 – IN-PERSON MATHEMATICAL STATISTICS AUTUMN 2021

Course overview

Instructor

Instructor: TBD Email address: TBD

Office hours: MWF 8:00-9:15am. There is no class on October 15 (Autumn break)

Office Location: TBD

Grader or Teaching Assistant

Will be announced later.

Course description

Statistics 6201 offers an introduction to some of the core concepts from probability theory and statistical inference. Topics covered include probability, random variables, expectation, moment generating functions, discrete and continuous distributions, limit theorems, maximum likelihood and Bayesian estimation, confidence intervals, hypothesis tests, Neyman-Pearson lemma, t and F tests.

Course learning outcomes

By the end of this course, students should successfully be able to:

- Work with and derive univariate and multivariate distributions.
- Derive distributions of transformed random variables.
- Formulate, construct and interpret confidence intervals about parameters in a statistical model.

• Formulate statistical hypotheses, construct appropriate hypotheses tests and interpret results.

Course materials

Required textbook:

Probability and statistics by Morris H. DeGroot and Mark H. Schervish (Pearson, ISBN: 978-0321500465)

Course technology

For help with your password, university e-mail, Carmen, or any other technology issues, questions, or requests, contact the OSU IT Service Desk. Standard support hours are available at https://ocio.osu.edu/help/hours, and support for urgent issues is available 24x7.

• Self-Service and Chat support: http://ocio.osu.edu/selfservice

Phone: 614-688-HELP (4357)

Email: 8help@osu.edu
 TDD: 614-688-8743

Baseline technical skills necessary for this course

- Basic computer and web-browsing skills
- Navigating Carmen

Necessary equipment

- Computer: current Mac (OS X) or PC (Windows 10+) with high-speed internet connection
- Webcam: built-in or external webcam, fully installed
- Microphone: built-in laptop or tablet mic or external microphone

Necessary software

- On occasion, I may use the statistical software package called R (The R Project for Statistical Computing; http://www.r-project.org/) to illustrate certain aspects. However, this software is not a requirement for this class. If you wish to download it, here is the information.
 - You can download R for Windows, Mac, and Linux, from the CRAN archive at https://cran.r-project.org.
 - An in-depth introduction to R is available at http://cran.r-project.org/doc/manuals/R-intro.pdf

- Hands-on tutorials are available in the Swirl system, which you can learn about at http://swirlstats.com/. In particular, "R Programming: The basics of programming in R" is an appropriate first tutorial for students who have never used R.
- An easier to use interface to R is available in the software package RStudio. This package
 is available for Windows, Mac, and Linux and can be downloaded for free from
 http://rstudio.org. Note that RStudio requires R to be installed.
- Microsoft Office 365 ProPlus All Ohio State students are now eligible for free Microsoft
 Office 365 ProPlus through Microsoft's Student Advantage program. Each student can
 install Office on five PCs or Macs, five tablets (Windows, iPad® and Android™) and five
 phones.
 - Students are able to access Word, Excel, PowerPoint, Outlook and other programs, depending on platform. Users will also receive 1 TB of OneDrive for Business storage.
 - Office 365 is installed within your BuckeyeMail account. Full instructions for downloading and installation can be found https://ocio.osu.edu/kb04733.

Grading and faculty response

Grades

Assignment or category	Percentage	
Homework	20	
Midterm 1, Date TBD	25	
Midterm 2, Date TBD	25	
Final Exam, Date TBD	30	
Total	100	

Assignment information

Homework: There will be weekly homework assignments posted on the course website. Homework is due once per week, with dates and times provided as needed.

Exams: There will be two midterm exams and one final exam. The final exam will take place at the time and date established by the University. Information about the exams will be posted well in advance through the course website

Late assignments

Generally late assignments are not accepted, and written documentation is required for missed assignments. If you are unable to complete an assignment on time, please get in touch with me as soon as possible so we can discuss your situation.

Grading scale

93–100: A

90-92.9: A-

87-89.9: B+

83-86.9: B

80-82.9: B-

77-79.9: C+

73–76.9: C

70 -72.9: C-

67 -69.9: D+

60 –66.9: D

Below 60: E

Faculty feedback and response time

I am providing the following list to give you an idea of my intended availability throughout the course. (Remember that you can call **614-688-HELP** at any time if you have a technical problem.)

Grading and feedback

For large weekly assignments, you can generally expect feedback within 7 days.

E-mail

I will reply to e-mails within 24 hours on school days.

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- **Tone and civility**: Let's maintain a supportive learning community where everyone feels safe and where people can disagree amicably.
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- **Backing up your work**: Consider composing your academic posts in a word processor, where you can save your work, and then copying into the Carmen discussion.

Other course policies

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Student academic services

Student academic services offered on the OSU main campus http://advising.osu.edu/welcome.shtml.

Student support services

Student support services offered on the OSU main campus http://ssc.osu.edu.

Academic integrity policy

Policies for this course

- **Exams**: You must complete the midterm and final exams yourself, without any external help or communication.
- Written assignments: Your written assignments, including discussion posts, should be your own original work. In formal assignments, you should cite the ideas and words of your research sources. You are encouraged to ask a trusted person to proofread your assignments before you turn them in--but no one else should revise or rewrite your work.
- Reusing past work: In general, you are prohibited in university courses from turning in
 work from a past class to your current class, even if you modify it. If you want to build
 on past research or revisit a topic you've explored in previous courses, please discuss
 the situation with me.
- Falsifying research or results: All research you will conduct in this course is intended to be a learning experience; you should never feel tempted to make your results or your library research look more successful than it was.
- Collaboration and informal peer-review: The course includes many opportunities for
 formal collaboration with your classmates. While study groups and peer-review of major
 written projects is encouraged, remember that comparing answers on a quiz or
 assignment is not permitted. If you're unsure about a particular situation, please feel
 free just to ask ahead of time.

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It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct http://studentlife.osu.edu/csc/.

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Accessibility accommodations for students with disabilities

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Accessibility of course technology

This course requires use of Carmen (Ohio State's learning management system). If you need additional services to use this technology, please request accommodations with your instructor.

• Carmen (Canvas) accessibility

Your mental health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614- 292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available through the 24/7 National Suicide Prevention Hotline at 1-800-273- TALK or at suicidepreventionlifeline.org

Disclaimer

This syllabus should be taken as a fairly reliable guide for the course content. However, you cannot claim any rights from it and in particular we reserve the right to change due dates or the methods of grading and/or assessment if necessary. Any changes will be communicated to you through official course announcements.

Course schedule (tentative)

Week	Dates	Topics	
1	8/23/21 – 8/29/21	Review of probability	
2	8/30/21 – 9/5/21	Sample spaces, events, conditional probability	
3	9/6/21 – 9/12/21	Independence, Bayes theorem	
4	9/13/21 – 9/19/21	Random variables, continuous and discrete distributions	
5	9/21/21 – 9/26/21	Multivariate distributions	
6	9/27/21 – 10/3/21	Functions of random variables	
7	10/4/21 – 10/10/21	Expectation, variance, moments, quantiles	
8	10/11/21 – 10/17/21	Covariance, correlation	
9	10/18/21 – 10/24/21	Conditional expectation	
10	10/25/21 – 10/31/21	Discrete distributions	
11	11/1/21 – 11/7/21	Continuous distributions	
12	11/8/21 – 11/14/21	Large sample theory	
13	11/15/21 – 11/21/21	Maximum likelihood estimation	
14	11/22/21 – 11/28/21	Bayesian estimation	
15	11/29/21 – 12/3/21	Hypothesis testing	
16	12/6/21 – 12/8/21	Hypothesis testing	

Arts and Sciences Distance Learning Course Component Technical Review Checklist

Course: STAT 6201 Instructor: TBD

Summary: Mathematical Statistics

Standard - Course Technology	Yes	Yes with Revisions	No	Feedback/ Recomm.
6.1 The tools used in the course support the learning objectives and competencies.	Х			CarmenOffice 365R Software
6.2 Course tools promote learner engagement and active learning.	Х			Zoom lectures Carmen Discussion boards
6.3 Technologies required in the course are readily obtainable.	Х			All are available within Carmen which is free to use.
6.4 The course technologies are current.	X			All items are updated regularly.
6.5 Links are provided to privacy policies for all external tools required in the course.	Х			All available privacy policies are included.
Standard - Learner Support				
7.1 The course instructions articulate or link to a clear description of the technical support offered and how to access it.	X			Links to 8HELP are provided, as is a link to R software support.
7.2 Course instructions articulate or link to the institution's accessibility policies and services.	X			а
7.3 Course instructions articulate or link to an explanation of how the institution's academic support services and resources can help learners succeed in the course and how learners can obtain them.	X			b
7.4 Course instructions articulate or link to an explanation of how the institution's student services and resources can help learners succeed and how learners can obtain them.	X			С
Standard – Accessibility and Usability				
8.1 Course navigation facilitates ease of use.	X			Recommend using the Carmen Distance Learning "Master Course" template developed by ODEE and available in the Canvas Commons to provide student-users with a consistent user experience in terms of navigation and access to course content.
8.2 Information is provided about the accessibility of all technologies required in the course.	Х			All available accessibility policies are included.
8.3 The course provides alternative means of access to course materials in formats that meet the needs of diverse learners.	Х			
8.4 The course design facilitates readability	Х			
8.5 Course multimedia facilitate ease of use.	Х			All assignments and activities that use the Carmen LMS with embedded multimedia facilitates ease of use. All other multimedia resources facilitate ease of use by being available through a standard web browser

Reviewer Information

Date reviewed: 12/7/2020Reviewed by: Ian Anderson

Notes: Good to go!

^aThe following statement about disability services (recommended 16 point font): Students with disabilities (including mental health, chronic or temporary medical conditions) that have been certified by the Office of Student Life Disability Services will be appropriately accommodated and should inform the instructor as soon as possible of their needs. The Office of Student Life Disability Services is located in 098 Baker Hall, 113 W. 12th Avenue; telephone 614- 292-3307, slds@osu.edu; slds.osu.edu.

^bAdd to the syllabus this link with an overview and contact information for the student academic services offered on the OSU main campus. http://advising.osu.edu/welcome.shtml

^cAdd to the syllabus this link with an overview and contact information for student services offered on the OSU main campus. http://ssc.osu.edu. Also, consider including this link in the "Other Course Policies" section of the syllabus.