



KENNESAW
STATE UNIVERSITY
College of Computing and
Software Engineering
Department of Computer Science
CS 7125 – Cloud Computing

SYLLABUS

FACULTY AND COURSE INFORMATION

Dr. Yong Shi

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Class Location and Meeting Times: M/W 8:00PM-9:15PM Atrium Building- 106 or online

Course Communication and Office Hours- M/W 6:15-7:15 PM

Electronic Communications -

In D2L, send emails to yshi5@kennesaw.view.usg.edu (**students must use their D2L email accounts to send to this address**)

Course materials will be available on D2L as semester goes on.

Reference books. (Not required):

Cloud Computing for Machine Learning and Cognitive Applications (MIT Press)

by Kai Hwang

ISBN-13: 978-0262036412

ISBN-10: 026203641X

GENERAL EXPECTATIONS FOR COURSEWORK IN GRADUATE PROGRAMS

Graduate study is markedly different from undergraduate study. This graduate course syllabus serves as a general description of goals and expectations in the course, as well as providing logistical and organizational information. It has been approved by the Faculty of your Academic Department to meet objectives in your discipline, as well as the University's Graduate Faculty standards for graduate study. It contains a number of resources for and expectations of you as a student. Instructionally, it is a general "plan" for the course and not a contract - please know that the course instructor is permitted some departures from it. If you have questions regarding this, please contact the Chair of your Academic Department.

1. Roles and Responsibilities. A graduate student should always remember that he or she is taking a particular graduate course to learn advanced content in an academic discipline. While graduate students are expected to think critically and ultimately be able to demonstrate mastery of advanced disciplinary knowledge, his or her instructor has already earned at least one – if not multiple – advanced degrees in the discipline, and spent (in some cases) decades studying it. A Graduate Faculty member may be regarded as a state or national authority in some aspect of the discipline being studied. Moreover, the instructor has an equal instructional obligation to all graduate students engaged in a particular learning activity. Consequently, the graduate instructor exercises

discretion in framing instructional interactions about the discipline with graduate students, which may include decisions to terminate discussions or move the discussion to another topic.

2. Responsibility for Demonstrating Mastery of Advanced Content. Admission to a graduate program is both elective and selective. In graduate study, a graduate student bears primary responsibility for acquiring knowledge about the discipline he or she is studying. The primary role of a graduate instructor is to assist the student in appropriately applying that knowledge at an advanced level in the discipline. Ultimately, a graduate course provides a graduate student with the opportunity to demonstrate that she or he can master and apply advanced knowledge in an academic discipline. The burden of demonstrating this mastery and application to the satisfaction of the Graduate Faculty lies solely with the graduate student.

3. Availability of Graduate Faculty Members. Members of the Graduate Faculty are expected to be authorities in their academic disciplines. In addition to teaching, graduate faculty members serve in significant research, professional, and academic roles. Graduate students should be aware that, in any given semester, these other responsibilities may constitute between forty (40) and eighty (80) percent of a professor's workload. Consequently, graduate students are advised to schedule meetings with their instructors well in advance, knowing that a Graduate Faculty member's research and service obligations may result in him or her not being able to respond to the student for up to two (2) days during the academic week (M-F).

4. Interactions with Graduate Faculty Members. A graduate student should ensure that his or her interactions with her or his instructors are professional and appropriate. It is a relationship that is far more analogous to an employment relationship than a social friendship.

Within the Classroom (or Analogous) Environment. While graduate student thinking and discussion is expected to be far deeper, more challenging, and more critical about the advanced topic being studied than in undergraduate coursework, the context in which these discussions are framed should remain academically detached and appropriate. An element of graduate education – and particularly the application of advanced content – may require a graduate student to demonstrate the ability to think and analyze advanced knowledge in the discipline in a detached and clinical fashion.

This can be challenging when the topic under discussion relates to assumptions the student has never challenged previously. Neither graduate students nor members of the Graduate Faculty should “personalize” these discussions. A graduate student does not have the right to disrupt instruction in a learning activity. If a graduate student believes he or she cannot continue to engage in the discussion with appropriate academic detachment, she or he should disengage from the activity until the time that he or she believes he or she can appropriately resume. Simply put, in graduate study, thinking should be disruptive – conduct should never be.

Outside the Traditional Classroom Environment. While graduate students and their faculty members may have richer and less formal interactions outside of the classroom environment than those in undergraduate programming (for example, having coffee together to discuss a particular aspect of a study the student wishes to conduct or jointly working on research), it is important for both the faculty member and graduate student to remember that the “formal” instructor/student relationship that undergirds these interactions, and act consistently with that. If a graduate student believes that the faculty member's interactions with him or her are inappropriate, the graduate student should contact the Department Chair of her or his academic department, or the appropriate University official.

5. Intellectual Property Issues. More than any other part of the University enterprise, graduate study may result in the creation of ideas and thinking that are legally recognized and protected as intellectual property. Consequently, graduate students should carefully monitor their conduct to ensure that they do not inadvertently misappropriate the intellectual property of a member of the Graduate Faculty or another graduate student. The Graduate College has prepared an overview of intellectual property issues

6. Electronic Recording. While graduate students may wish to electronically record a class session as a study aid, in graduate school, this requires a careful balancing of the interests of the student, her or his fellow students, and the graduate instructor. Consequently, a graduate student may not disseminate any electronically recorded class discussion unless given explicit permission by the graduate instructor in writing. Irrespective of whether the student disseminates it, a graduate student should ask permission of his or her graduate instructor before electronically recording the instructor's lectures.

A University generates ideas, and ideas can become intellectual property irrespective of whether they are written in a book or paper. As a recognized authority in her or his academic discipline who has spent years studying, synthesizing, and expanding advanced knowledge in the academic discipline to which he or she has devoted his or her life's work, a graduate instructor has a legally-recognized property interest in her or his thinking about that work, which may include the graduate instructor's lectures. Kennesaw State University prohibits the misappropriation of intellectual property (which is a form of theft), which can result in discipline for a graduate student, up to and including dismissal from the University. If the graduate student is also a member of a profession with an applied code of ethics, it may additionally result in professional discipline, as well as subjecting the student to any civil legal remedies protecting intellectual property. Graduate students should recognize the rights of their fellow graduate students to engage in free exchange of ideas in their graduate coursework, asking questions or making observations that they might not make if they believed those observations could be publicly disseminated without their knowledge or permission.

If a student needs to electronically record a course as a result of a recognized disability or other exceptionality, the student should contact the University's Disabled Student Support Services to develop an appropriate reasonable accommodation.

COURSE DESCRIPTION, CREDIT HOURS, AND PREREQUISITES

CS 7125- Cloud Computing

3 Class Hours 0 Laboratory Hours 3 Credit Hours

Prerequisite: CS 5020

In this course, we will discuss concepts including cloud computing, cloud computing architecture, infrastructure as a Service(IaaS), Platform-as-a-Service(PaaS), Software as a Service(SaaS), etc. We will study commercial products such as Amazon EC2. We will also discuss advanced topics such as Cloud simulation tools and open sourced software for Cloud environment.

Students are required to create accounts for AWS, Google App Engine, etc. Some of them may require your credit/debit card information. However, you will not be charged as long as you only use their free tier services.

At the end of the semester, students will be required to give presentation and/or write research report for assigned research papers.

COURSE LEARNING OUTCOMES

At the end of the course students will be able to:

- 1) Explain fundamental concepts and architecture of Cloud Computing
- 2) Explain the concepts of Infrastructure as a Service (IaaS) and create various instances on Amazon EC2
- 3) Explain the concepts of Platform-as-a-Service (PaaS) and work on projects with PaaS commercial products
- 4) Explain the concepts of Software as a Service (SaaS)
- 5) Explain virtualization
- 6) Explain Hadoop, HDFS, and MapReduce
- 7) use Amazon EC2 to create instances of various needs

- 8) use cloud simulation tools to simulate the activities in cloud environment
 9) research and critique computing literature, and utilize it for proposing solutions

COURSE CONTENT AND REQUIREMENTS/GRADING SCALE

Course Schedule (Tentative, subject to change):

Week		Topic
1	8/19	Syllabus and introduction of Cloud Computing
2	8/26	Cloud and Cloud Architecture
3	9/2	Labor Day , Cloud and Cloud Architecture, CloudSim introduction
4	9/9	Test 1 Tentative , Cloud and Cloud Architecture, CloudSim
5	9/16	CloudSim Network Topology
6	9/23	CloudSim Network Topology
7	9/30	CloudSim Network Topology, Infrastructure as a Service (IaaS), EC2
8	10/7	EC2
9	10/14	Test 2 Tentative , EC2
10	10/21	CloudSim Task Scheduling, Platform-as-a-Service (PaaS)
11	10/28	Platform-as-a-Service (PaaS)
12	11/4	Platform-as-a-Service (PaaS), Hadoop, Mapreduce
13	11/11	Hadoop, Mapreduce
14	11/18	Test 3 Tentative , Software as a Service (SaaS)
15	11/25	Fall break
16	12/2	Student reports
17	12/9	Student reports
18		Final exams week

Grading Scale and Course Policies

Grading Scale:

Successfully completed programs must satisfy their requirements outlined in the programming assignments. The assignment grade depends on the quality of the program. All assignments are individual work. You are encouraged to discuss assignments with other students as long as the following rules are followed:

1. You may provide assistance on how to use any of the software used by this course.
2. You view another student's code only for the purpose of offering debugging assistance. Students can only give advice on what to look for, but they cannot debug your code for you. All changes to your code must be made by you.
3. Your discussion is subject to the empty hands policy, which means that you leave the discussion without any record (electronic or physical) of the discussion.
4. Submissions that show identical code or slightly modified code will be considered plagiarism and are a violation of the Student Code of Conduct. For all homework assignments, if a student consults any resource (other than the text and class notes) including another individual, this consultation must be documented on the submission. This documentation must include what (or who) was consulted and what information was obtained. *Copying or paraphrasing code from another source or failure to provide this documentation will be considered a violation of the Student Code of Conduct.*

Due dates for homework assignments will be specified on the assignments themselves. *Late assignments will be accepted up to 24 hours after the due date for 50% credit. Assignments submitted more than 24 hours late will **not be accepted** for credit.*

Attendance and Quizzes	5%	A	90 - 100
Assignments, projects, presentations, reports/final test	50%	B	80 - 89
Test I	15%	C	70 - 79
Test II	15%	D	60 - 69
Test III	15%	F	59 or below

Course Policies:

Attendance Policy: class attendance and good note taking are essential tactics for success

Quiz/Exam Policy: There will be 3 midterm examinations and a final examination. The content will come from the text and other material presented in lecture sessions. Therefore, class attendance and good note taking are essential tactics for success.

Make-up Policy:

There will be **no make-up examinations**. It is the student's responsibility to arrange for an excused absence before the exam. A grade of zero will be assigned for all exams missed without an excused absence. If an emergency arises on the day of a midterm, and the instructor deems that the absence is excused, the weight of the final exam may be increased to replace the midterm.

Due dates for homework assignments will be specified on the assignments themselves. *Late assignments will be accepted up to 24 hours after the due date for 50% credit. Assignments submitted more than 24 hours late will **not be accepted** for credit.*

Course Technology: We will mainly use D2L and additional webpages and tools for this course.

Electronic Devices and Classroom Behavior Policy:

In order to minimize the level of distraction, all beepers and cellular phones must be on quiet mode during class meeting times. Students who wish to use a computer/PDA for note taking need prior approval of the instructor since key clicks and other noises can distract other students. Recording of lectures by any method requires prior approval of the instructor. Students using a laptop in class should not check their email, browse the web, or in other way detract from the focus of the class.

Students are reminded to conduct themselves in accordance with the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. Every KSU student is responsible for upholding the provision. Students who are in violation of KSU policy will be asked to leave the classroom and may be subject to disciplinary action by the University.

COURSE WITHDRAWAL

See below for commentary on withdrawals from the 2018-2019 Graduate Catalog:

Students may withdraw from one or more courses up to one week prior to the last day of class. To completely or partially withdraw from classes at KSU, a student must withdraw online at www.kennesaw.edu, under Owl Express, Registration and Student Records. Students who officially withdraw from courses before mid-semester will receive a "W" in those courses and receive no credit. They will not, however, suffer any academic penalty. Students who officially withdraw after mid-semester one week prior to the last day of class will receive a "WF," which will be counted as an "F" in the calculation of their grade point average. Exact withdrawal dates will be published in the official academic calendar and are subject to approval by the Board of Regents.

The only exceptions to these withdrawal regulations will be for instances involving unusual circumstances that are fully documented.

Students will receive refunds only when they withdraw from all their classes and only by the schedule outlined in the University System refund policy.

The last day to **withdraw** without academic penalty is **October 9**.

GRADE APPEALS AND STUDENT COMPLAINTS

See below for commentary on Grade Appeals in the 2018-2019 Graduate Catalog:

Grade appeal will follow the level of the course. Students' rights to grade appeals are defined in the university catalog. A key element in the grade appeal procedure is the faculty member's responsibility to publish a specific grading policy for each of his/her classes. Specifically, the grade appeal procedure states: "Each faculty member must specify his/her grading policy, at the first of the semester. He/she may change his/her grading policy for cause after that time, but he/she must do so uniformly, with ample notification to students, if at all possible."

Note that failure to publish the grading policy would mean that a faculty member would have great difficulty in sustaining his/her assigned grade if a student appealed with anything but a frivolous or irresponsible basis for his/her charge. The grading policy should be quite specific and should be distributed to each class in written form. Some departments may also require faculty members to file grading policy statements in the departmental office. Because the student can submit a grade appeal to the Department Chair within 20 business days after the first day of classes of the next academic term after the academic term in which the final grade was awarded to the student (see Grade Appeals Procedure, section B), it is strongly recommended that instructors retain any student papers, tests, projects, or other materials not returned to the student for 70 days after the end of a semester or if an appeal is filed until the appeal is resolved. Refer to the following section for specific grade appeal procedures.

Students can find more details regarding the appeal process here:
<http://catalog.kennesaw.edu/content.php?catoid=39&navoid=3087>

ACADEMIC INTEGRITY

Every KSU student is responsible for upholding all provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. The Code of Conduct includes the following:

- Section II of the Student Code of Conduct addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/falsification of University records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the University Judiciary Program, which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement.
- Students involved in off-campus activities shall not act in a disorderly or disruptive fashion, nor shall they conduct any dangerous activity.
- Students involved in off-campus activities shall not take, damage or destroy or attempt to take, damage or destroy property of another.

ADDITIONAL STUDENT RESOURCES

For CCSE Student resources:

<http://ccse.kennesaw.edu/student-resources.php>

KSU Service Desk:

The KSU Service Desk is your portal to getting assistance or access to University IT Services. Students call: 470-578-3555 or email studenthelpdesk@kennesaw.edu

Information and links to Resources for Graduate Students:

<http://graduate.kennesaw.edu/students/>

Links to frequently used and helpful services:

<http://www.kennesaw.edu/myksu/>

Acknowledgement and Acceptance of Academic Honest Statement

CS 7125

Every KSU student is responsible for upholding the provisions of the Student Code of Conduct, as published in the Undergraduate and Graduate Catalogs. Section II of the Student Code of Conduct addresses the University's policy on academic honesty, including provisions regarding plagiarism and cheating, unauthorized access to University materials, misrepresentation/falsification of University records or academic work, malicious removal, retention, or destruction of library materials, malicious/intentional misuse of computer facilities and/or services, and misuse of student identification cards. Incidents of alleged academic misconduct will be handled through the established procedures of the University Judiciary Program, which includes either an "informal" resolution by a faculty member, resulting in a grade adjustment, or a formal hearing procedure, which may subject a student to the Code of Conduct's minimum one semester suspension requirement.

Students are encouraged to study together and to work together on class assignments and lab exercises; however, the provisions of the STUDENT CONDUCT REGULATIONS, II. Academic Honesty, KSC Undergraduate Catalog will be strictly enforced in this class.

Frequently students will be provided with "take-home" exams or exercises. It is the student's responsibility to ensure they fully understand to what extent they may collaborate or discuss content with other students. No exam work may be performed with the assistance of others or outside material unless specifically instructed as permissible. If an exam or assignment is designated "no outside assistance" this includes, but is not limited to, peers, books, publications, the Internet and the WWW. If a student is instructed to provide citations for sources, proper use of citation support is expected. Additional information can be found at the following locations.

<http://www.apa.org/journals/webref.html>

<http://www.lib.duke.edu/libguide/citing.htm>

<http://bailiwick.lib.uiowa.edu/journalism/cite.html>

<http://www.cas.usf.edu/english/walker/papers/copyright/ipdummie.html>

<http://www.indiana.edu/~wts/wts/plagiarism.html>

<http://plagiarism.phys.virginia.edu/links.html>

<http://www.arts.ubc.ca/doi/plagiarism.htm>

<http://alexia.lis.uiuc.edu/%7ejanicke/plagiarism.htm>

<http://webster.commnet.edu/mla/plagiarism.htm>

<http://www.virtualsalt.com/antiplag.htm>

http://www.engr.washington.edu/~tc231/course_info/plagiarism.html

<http://quarles.unbc.edu/lsc/rpplagia.html>

CS 7125 Cloud Computing

Course Name

Print Name

Signature

Dr. Yong Shi

Instructor Name

Student ID Number

Date

CS 789: Topics in Advanced Computer Science (Advanced Big Data Analytics)

Fall 2019

Sections 1003

Instructor: Mingon Kang

Phone: 702-895-4884

Office: SEB 3214

Email: mingon.kang@unlv.edu

Office hours: Tu/We: 10:00 AM – 11:30 AM, 02:00 PM – 03:30 PM

Class website: <http://mkang.faculty.unlv.edu/?menu=CS789>

Catalog Description

This course covers algorithms and tools that are needed to build MapReduce Applications with Hadoop or Spark for processing large-scale datasets on clusters of commodity hardware. A wide range of analytics algorithms will be discussed in this course. Prerequisites: None. 3 credits.

Required Text:

Not mandatory, just a reference - Advanced Analytics with Spark: Patterns for Learning from Data at Scale (2nd Edition) by Sandy Ryza, Uri Laserson, Sean Owen, Josh wills, O'Reilly Media, 2017, ISBN#: 9781491972953. Homework assignments, lecture slides, and other materials will be posted on the course webpage or canvas.

Student Learning Outcomes (SLOs) Covered by This Course

At the end of the course students will be able to:

1. Explain MapReduce framework for big data analytics
2. Use Spark for big data analytics
3. Design and implement a wide range of analytics algorithms

Prerequisites

None

Grading

Grades will be based on following:	Attendance	5%
	Homework	20%
	Midterm	25%
	Final	30%
	Project	15%
	Presentation	5%

Grades will be posted throughout the semester.

Grading is as follows:

A	A-	B+	B	B-	C+	C	C-	D	F
>90	90-85	85-80	80-75	75-70	70-65	65-60	60-55	55-45	<45

Graded assignments will be returned to you as soon as possible. It is your responsibility to check the grade summaries for posting errors. Any score issues must be identified to the instructor within three classes after grade releases. Scores are final after that.

Two tests will be given during the semester. Each test will be somewhat comprehensive, but will strongly emphasize material covered since the last test. Tests will be announced two or three class days in advance. There will be NO MAKEUP for missed tests.

Academic Misconduct

Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution.

An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the Student Academic Misconduct Policy (approved December 9, 2005) located at:
<http://studentconduct.unlv.edu/misconduct/policy.html>

Department of Computer Science Academic Integrity Policy

Each student enrolled in a course offered by the Department of Computer Science is expected to do his/her own work when preparing written or programming assignments, as well as, examinations. He/She must adhere to the academic integrity policy provided by his/her instructor and the university. It is also each student's responsibility to notify the instructor if he/she becomes aware of any activities that would violate the academic integrity policy of the class.

CS 789 Academic Integrity Policy

Each student is required to do his/her own work on examinations, written and programming assignments and exercises without outside assistance except as noted below. It is also each student's responsibility to notify the instructor if he/she becomes aware of any activities that would violate the academic integrity policy of the class.

Consequences of violating the academic policy:

- an Alleged Academic Misconduct Report will be completed and a copy sent to the Office of Student Conduct
- 1st violation - student(s) will receive a grade of zero on the assignment/examination
- 2nd violation - a grade of F will be issued for the course; no further assignments/labs/exams can be completed for credit

Drop Policy

The last day to drop the course is Friday, November 1, 2019.

Copyright

The University requires all members of the University Community to familiarize themselves with and to follow copyright and fair use requirements. **You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws.** Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: www.unlv.edu/provost/copyright.

Disability Resource Center (DRC)

The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you. If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor before or after class to discuss your accommodation needs.

Religious Holidays

Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor within the first 14 calendar days of the course for fall and spring courses (excepting modular courses), or within the first 7 calendar days of the course for summer and modular courses, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

Transparency in Learning and Teaching

The University encourages application of the transparency method of constructing assignments for

student success. Please see these two links for further information:

<https://www.unlv.edu/provost/teachingandlearning>

<https://www.unlv.edu/provost/transparency>

Incomplete Grades

The grade of I - Incomplete - can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student's control, and acceptable to the instructor and the Department, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

UNLV Writing Center

One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>

UNLV Library Resources

Students may consult <https://www.library.unlv.edu/consultation> with a librarian on research needs. For this class, the subject librarian is Sue Wainscott. See:

https://www.library.unlv.edu/contact/librarians_by_subject for more information. UNLV Libraries provides resources to support students' access to information. Discovery, access, and use of information are vital skills for academic work and for successful post-college life. Access library resources and ask questions at <https://www.library.unlv.edu>.

Rebelmail

By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students' e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu.

Final Examinations

The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: <http://www.unlv.edu/registrar/calendars>.

Tentative Schedule:

The tentative schedule is shown below.

Week	Dates	CS 789 Syllabus
1	26 Aug – 28 Aug	Discussion of course syllabus and policies, Course webpage; Introduction Machine Learning, Data Mining, and Big Data Analytics; Introduction to research
2	2 Sep - 4 Sep	Holyday at Sep 2nd Introduction to Big Data
3	9 Sep – 11 Sep	Hadoop & MapReduce Framework
4	16 Sep – 18 Sep	Apache Spark and NoSQL
5	23 Sep – 25 Sep	Decision trees
6	30 Sep – 2 Oct	Evaluation
7	7 Oct – 9 Oct	Linear regression
8	14 Oct – 16 Oct	Regularization on Linear regression
9	21 Oct – 23 Oct	Midterm
10	28 Oct – 30 Oct	Naïve Bayes Classifier
11	4 Nov – 6 Nov	Principal Component Analysis
12	11 Nov – 13 Nov	Holyday at Nov 11th Fisher Linear Discriminant Analysis
13	18 Nov – 20 Nov	K-means Clustering
14	25 Nov – 27 Nov	Project Presentation
15	2 Dec – 4 Dec	Project Presentation
16	9 Dec – 13 Dec	Final