

Syllabus GAM 470 Quantitative Methods and Applications in Casino Gaming

Office Hours: Wednesday 4 - 5 pm
Thursday: 3:30 - 5 pm

Course Description:

Develops the techniques and methods for computing the probabilities, expected values, house percentages of casino games and analyzes the effects of changes in playing rules and payoff odds. The topics covered are listed in the table on page 2 of the syllabus.

Course Objectives/Outcomes:

- Describe common terms relating to casino game performance
- Demonstrate a respect for how math affects the outcome in casino games
- Mathematically analyze many common casino games
- Understand how rule variation can change casino game performance
- Master mathematically proven player strategies for the most popular casino games
- Articulate basic statistics and how statistics gets applied in casino operations

No Textbook is required: Recommended Reading Material:

Casino Math by Robert C. Hannum and Anthony N. Cabot

Course Grading:

Quizzes: 40%

Midterm: 30%

Final: 30%

Grading Scale:

A = 93-100%	C=73-76%
A-= 90-92%	C-=70-72%
B+ =87-89%	D+ =67-69%
B =83-86%	D =63-67%
B-=80-82%	D-=60-62%
C+ =77-79%	F =Below 60%

Syllabus GAM 470 Quantitative Methods and Applications in Casino Gaming Fall 2016

Academic Integrity:

Cheating in any manner will not be tolerated. Any student involved in academic dishonesty will receive a zero for the assignment or test for the first instance. Any further instances of academic dishonesty will result in a failing grade for the course.

Disability Resource Center:

Schedule:

WEEK	Month	Dates		MODULE	TOPICS	QUIZ/ Availability
1	August 2015	24	28	1, 2	History of Gaming, Set Theory	
2	Aug – Sep 2015	31	4	3, 4	Probability, Odds	1 (Sep 3 – 6)
3	September 2015	8*	11	5, 6	Expected Value, Counting Rules,	
4		15	18	7, 8	Casino Metrics, Slots, Stats for Casino Ops	2 Sep 17 – 20)
5		21	25	9, 10	Keno, Roulette	
6	Sep 30 - Oct 2	28	2	11	Craps	3 (Oct 1 – 4)
7		6	9	12, 13	Baccarat, War, Money Wheel, Blackjack	4 (Oct 8 – 11)
8	October 2015	13	16		Midterm Review, Midterm Exam	(Oct 11 – 17)
9		20	23	15	Poker	
10		27	30		Video Poker	5 Oct 29 – Nov 1)
11	November 2015	3	6	15	Sports Betting	
12		10*	13	16	Price Setting/Volatility	6 (Nov 5 – 8)
13		17	20	17	Complimentaries,	
15		24	25*	18, 19	Rebates & Discounts, Regulatory Issues	7 (Nov 26 – 29)
15	Nov – Dec 2015	30	4		Study Week	
16	December	12	14		FINALS WEEK	(DEC 12 – 17, 2015)

* September 5: Labor day, November 11: Veterans Day
Thanksgiving Day recess: Nov 24-25, 2015

UNLV POLICIES AND RESOURCES

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: <https://www.unlv.edu/studentconduct/student-conduct>.

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: <http://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 in front of others to discuss your accommodation needs.

Religious Holidays Policy – 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 no later than the end of the first two weeks of classes, **January 29, 2016**, 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>.

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, 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 for undergraduate courses. Graduate students receiving "I" grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. 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 grade.

Tutoring – The Academic Success Center (ASC) provides tutoring and academic assistance for all UNLV students taking UNLV courses. Students are encouraged to stop by the ASC to learn more about subjects offered, tutoring times and other academic resources. The ASC is located across from the Student Services Complex (SSC). Students may learn more about tutoring services by

calling 702-895-3177 or visiting the tutoring web site at:

<http://academicsuccess.unlv.edu/tutoring/>.

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/>

Library Resources – Students may consult with a librarian on research needs. For this class, the subject librarian is Lateka Grays (<http://guides.library.unlv.edu/hospitality>). 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/>.

Communication within the College

All students are encouraged to subscribe to the student listserve for the College of Hotel Administration. To subscribe, go to: <http://groups.yahoo.com/group/unlvhotelcollege> . All information relevant to the College, job opportunities, activities, clubs, scholarships, etc. will be posted on this list serve. To be informed of opportunities available to you, YOU NEED TO BE A SUBSCRIBER TO THE LISTSERVE.

Academic Advising:

Academic advising is available through the college's Student Advising Center – BEH 543.

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. Emailing within WebCampus is acceptable.

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>.

University Property and Security: If caught misappropriating State property, the student will be dropped from the College. The University may also wish to press formal charges. If you purchase items used in operation, you will be reimbursed for this purchase (if you have a proper receipt). Once you have been reimbursed, those items purchased become property of the University of Nevada, Las Vegas. No reimbursement will be made without proper receipt of purchase and strict adherence to UNLV policy.

Students should not bring valuables, personal items unrelated to course activities, or book bags into the building. The University of Nevada, Las Vegas staff and/or faculty will not be held responsible for the loss of personal items or valuables.

All books, papers, notebooks, and class-related items should be kept secured during the class. If you have valuables that must be locked please let your instructors know so that you can place your items in a secured office during class hours.

Alcohol and Drug Use: Students who consume any type of alcoholic beverages, use illegal drugs during class time, or attend class intoxicated will be immediately dropped from the course and sent to the university disciplinary board with recommendation for expulsion. Please do not come to class under the influence.

Insurance: The University of Nevada System does NOT carry insurance for students working in laboratories. This includes the Hotel College kitchens, dining rooms, and lounge/bar. Each student will have to provide his/her own coverage. If you are not covered by a family policy, you should purchase student insurance from the University. Information is available from the registrar's office. Although our safety record has been good, there is always a chance that an injury could occur that results in a trip to the hospital. Should an incident such as this occur, the University will not pay for the expenses incurred; it will be the responsibility of the student.