# Honors 191: Bridge: game of games

### Fall 2020

Instructor:Dr. Anya Buttanya.butt@central.edux7496Office hours:M 11-12, W1-3, R 10-11VSC 128Days/times/location:W 7-9:30 pmVSC 165

No matter where I go, I always make friends at the bridge table – Martina Navratilova

**Description**: Bridge is a card game focused on cooperation and communication, within a constrained setting. It has been described as the ultimate in intellectual competition. This course will be divided into two sections: learning the game of bridge, along with modern day conventions to allow one to be competitive at duplicate or contract bridge, and understanding the impact of bridge in modern societies through readings and discussion. We will cover the evolution of cards and card games, mathematical principles, game theory in settings with incomplete information, and communication strategies. We also examine the impacts of bridge on society, including its evolution, its global reach, its recreational aspects (as well as explore literature based around bridge) and the business side of bridge. Finally, we will examine the psychological benefits of bridge and its community building aspects.

Overall, I am generally more than delighted to talk/email with students, so anytime you have a question, would like something clarified or need other help, feel free to contact me either during office hours, by phone or by email anytime.

#### Outcomes for the students:

- Become proficient bridge players; gain a life-long learning pursuit
  - Learn history, conventions, terminology of modern bridge
  - o (related to the student leaning objective "make students aware of programs that engage their individual gifts and talents")
- Improve cognitive capabilities and critical analysis
  - (related to the student leaning objective "promote academic excellence")
- Engage in community and cooperation building exercises
  - o (related to the student leaning objective "foster mentoring relationships between students and faculty")
- Learn to communicate clearly with a partner
- Improve understanding of mathematical probabilities

Text: (required): Sachar, L., The cardturner. Random House. ISBN 978-0-385-73663-3

Allen, K., 2011, Deadly Endplay, Master Point Press, ISBN-13: 978-1897106686

Grant, Audrey, Bridge Basics 1-3 (there is a good package deal at Baronbarclay.com at <a href="https://www.baronbarclay.com/bridge-basics-1-2-3-bridge-at-a-glance/">https://www.baronbarclay.com/bridge-basics-1-2-3-bridge-at-a-glance/</a>)
Other readings as assigned

#### Assessment:

Analysis of problem from "The card turner"	5%
Written analysis of a bridge hands	10%
Bridge biography of a bridge player	15%
Attendance/Participation/Discussion of assigned readings during course	20%
Participation in 3 CBO sanctioned tournament by end of semester	12%
Premise for a fictional story	6%
Analysis of "Deadly Endplay"	7%
Final reflection paper	25%

<u>Blackboard explained</u>: Throughout the semester, I will be posting grades on blackboard. The Blackboard site for this course is set to include all the work of the course in the weighted column grade. Thus, early in the semester it may seem like you have a low grade, but that is because essentially only a few of the percentage points have been awarded. Think of it like a staircase. You start at the bottom and everything you do and hand it earns you percentage points towards your final grade.

Week	Meeting dates	<u>Topic</u>	Reading	Bridge lessons
1	Aug 26	Introduction to class, history of cards/evolution of cards	Brief History of Bridge	Whist, Bridge Basics
			Why play bridge?	Grant 1 - Chapter 1
			Why I play bridge	
2	Sept 2	History/evolution of bridge	Sacher 1-124, Scott	No-trump and responses
				Grant 1 - Chapter 2
3	Sept 9	Math as a strategy: point counts and probabilities	Sacher 125-219	Major bids and responses
			Ando et al; Vanclelette	Grant 1 – Chapter 3
			<b>Hand patterns/Aunt Lucy</b>	
			Basic probabilities	
4	Sept 16	Scoring; game theory re: different types bridge	Sacher 220- 336	Minor bids and responses
			Links on Bb	Grant 1 – Chapter 4
5	Sept 23	Communicating within a limited environment	Amit and Markovitch;	Overcalls, competitive auctions
			Gamback et al, Simons	Grant 2- Chapter 2, 3, 4
6	Sept 30	Codes of behavior	Readings on ethics online	Preemptive bidding/Weak 2s
				Grant 2 – Chapter 1, 4
7	Oct 7	Bridge as recreation/sociology of bridge	Scott and Godbey	Planning your hand, developing tricks
			Munday	ACBL Diamond, Chapter 1,2
8	Oct 14	Bridge as a community builder	Balint et al	Finessing, trumping and discarding
				ACBL Diamond, Chapter 3, 4, 7
9	Oct 21	Bridge in the age of COVID	Readings online	Strong openers: 2C, 2NT
				Grant 3 – Chapter 3
10	Oct 28	Bridge and its role in memory and cognition	Ashworth et al, Charness	Conventions: Slam bidding
			Clarkson-Smith and Hartley;	Grant 3- Chapter 4
11	Nov 4	Bridge in fiction and as literature	Start Deadly Endplay	Opening leads, defensive play
				ACBL Heart – Chapters 1-4
12	Nov 11	Convention cards		Tournament play
13	Nov 18	Cryptology in bridge	Winkler	Conventions: Stayman
		Bridge as a mind sport	Finish Deadly Endplay	Grant 3 – Chapter 1
15	Dec 2	Bridge across the world	Vocabulary handouts	Conventions: Jacoby transfers
				Grant 3 -Chapter 2
16	Dec 9	Bridge in the news	Cowan, 1987	Defensive signals
				ACBL – Chapter 5, 6, 7
Final	Dec 16	Bridge tournament		

### COVID-19 response and expectations

During face-to-face instruction, labs, office hours, discussion sections, and other in-person academic activity, faculty, students, and classroom guests will wear the appropriate personal protective equipment (e.g, masks or shields), as well as any additional PPE (e.g. gloves, lab coats, protective eyewear) specified by the course instructor, in accordance with the guidelines outlined by Central College. Wearing PPE protects members of our Central College community, many of whom are in the most vulnerable populations and may not feel comfortable disclosing their health condition to everyone. Using PPE properly is a sign of empathy and care for each other. Individuals without their PPE will not be able to participate in class until they acquire and wear the appropriate PPE. Consistent with existing practices regarding disruptive classroom behavior, individuals who choose not to abide by this expectation will be asked to leave.

### <u>In-Person Instructional Etiquette for Students & Faculty:</u>

In addition to wearing appropriate PPE, faculty, students, and classroom guests:

- Should refrain from coming to class if they experience any of the COVID-19 symptoms or if they have come in contact with any person recently diagnosed with COVID-19. Students please contact the Office of Student Development (email: studentdevelopment@central.edu; phone: 641-628-5293). Also, please let your faculty member and your Class Dean know of your absence, and they will help you keep up with class work.
- Should sanitize their hands upon entering and exiting the classroom.
- Should maintain the appropriate distance between themselves and others in the classroom (6ft or as specified by the instructor).
- Should clean their desk or workspace surfaces at the beginning of class per health protocols and as directed by their instructor.

# Class specific COVID-19 etiquette:

- We are learning how to play bridge. Bridge requires a foursome to sit around a table. Thus, we will need to take extra precautions during class. The room will be equipped with physical barriers set up on the tables to create physical separation. Do not move or touch these. Seat yourself at one of those seats
- Sanitize your hands upon entering the class. I will have sprayed down the tables before you enter, since I will place the physical barriers on the tables after that.
- We will be playing bridge duplicate style. Cards will be provided to you via tray. You will take the cards for your position, play with those 13 cards and return those to the tray when done. Another set of cards will be provided via a new tray for the next hand. No one else should touch your cards.
- During the week's time between the classes, the sets of cards used will be set aside, untouched. I have enough packs of cards that we can allow sufficient time for any possible COVID-19 virus to expire on cards that are used, creating a two week cycle for cards used..
- Each player has a bidding box at their table. At the end of the first class, I will teach you how to collapse that box. Each box will be labeled with your name and you will use that same box throughout the semester. These bidding boxes will be stored away for the week and returned to you each class period. No one else will use those boxes during the week.
- Feel free to sanitize your hands throughout the class. More caution is always better.
- Our class is scheduled for 2 ½ hours. We will take a break during class to allow everyone a chance to go outside, spread out, take off your mask and relax your ears for a spell.

## Course policies:

Assigned reading is to be done prior to class or lab

Cell phones that ring during class tend to be confiscated. Remember to turn them off beforehand.

**Academic dishonesty will not be tolerated**. Please consult the catalog for the relevant policies. Do your own work and reference anything that is not your own.

Notification of **Participation in College Sanctioned Events**: Mock Trial participants, choir tour participants, athletes, and others who must miss a class for participating in a college sanctioned event are expected to notify me in advance and complete work including tests in advance of the absence (at least 48 hours). It is the student's responsibility to communicate with me in advance regarding their absences and determine a schedule for make-up work. It is also your responsibility to be aware of the Central College policy that excused absences for such events should be held to 10% of the course meetings, with 15% as an absolute maximum (representing 4-6 class periods). Remember – some experiences and events CANNOT be made up, even with an excused absence, and it is your responsibility to plan accordingly. Missing class, even with an excused absence puts you at a disadvantage, as you will have missed time and content.

Central College abides by interpretations of the **Americans with Disabilities Act** and Section 504 of the Rehabilitation Act of 1973 that stipulates no student shall be denied the benefits of an education "solely by reason of a handicap." Disabilities covered by law include, but are not limited to, learning disabilities, hearing, sight, or mobility impairments, and other health related impairments. If you have a documented disability that may have some impact on your work in this class for which you may require accommodations, please see me and Nancy Kroese, Director of Student Support Services and Disabilities Services Coordinator, (x 5247) during the first two weeks of the semester so that such accommodations may be arranged.

**Plagiarism** and cheating of any form are serious offenses and may result in an F for the assignment, the course, or expulsion from the college. The details of Central's Academic Integrity policy are found in the Student Handbook, on the web. A copy will be sent to you via e-mail during the first week of the semester. It is **your** responsibility to read and understand the contents of that policy before you submit work to be graded. Questions regarding the policies and enforcement of the policies may be addressed to me during class or during office hours

Bibliography (ie, citations for the readings) (all of these are on blackboard, some of these are hotlinked to articles on line):

Amit, A., and S. Markovitch, 2006. Learning to bid in bridge. Machine Learning 63:287-327

Ando, T., N. Kobayashi, and T. Uehara, 2003. Cooperation and competition of agents in the auction of computer bridge. Electronics and communications in Japan 86(12) Ashworth, R., S. Punch and C. Small, 2016. A review of possible interventions into healthy ageing and cognitive stimulation: exploring the links between bridge and dementia. Balint, M., V. Posea, A. Dimitru, and A. Iosup, 2011. An analysis of social gaming networks in online and face to face bridge communities. Proceedings of the 3<sup>rd</sup> international workshop on large-scale system and application performance. San Jose, California. Pages 35-42.

Charness, N., 1983. Age, skill and bridge bidding. Journal of verbal learning and verbal behavior. 22(4):406-416.

Clarkson-Smith, L., and A.A. Hartley, 1990. The game of bridge as an exercise in working memory and reasoning. Journal of Gerontology 45:233-238

Cochran, R.S., 1971. Designs with redeeming social aspects for evenings of social bridge. The American Statistician 25:12-15

Cowan, R., 1987. Hand evaluation in the game of contract bridge. Journal of the Royal Statistical Society Series C, 36:58-71.

Dombrowski, C., 2020. Survival mode. Bridge Bulletin, June 2020, pages 12-13...

Frank, II and D. Basin, 1998. Search in games with incomplete information: a case study using Bridge card play. Artificial intelligence 100:87-123.

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Gamback, B., M. Bayner, and B. Pell, 1993. Pragmatic reasoning in bridge. Technical report NO 030. SRI International

Levey, B., 2020. Fitness Bridge. Bridge Bulletin, June 2020, page 22.

Munday, S., 2020. A toast to the beer card. Bridge Bulletin, June 2020, pages 28-29.

Morse, S., 2020. Bridge in the time of corona. Bridge Bulletin, June 2020, page 14-15.

Scott, D., 1991. A narrative analysis of a declining social world: the case of contract bridge. Play and Culture 4(1): 11-23.

Scott, D., and G. Godbey, 1994. Recreation specialization in the social world of contract bridge. Journal of Leisure Research 26(3):274-295.

Simons, J.L., 2006. Bridge cryptography fundamentals. Cryptologia 30:281-286.

Winkler, P., 1983. The advent of cryptology in the game of bridge. Cryptologia 7:327-332.

Vancelette, C., 2020 Yarboroughs and the Theory of Probability Bridge Bulletin, June 2020, page 51.

Zweifel, P.F., 1986. Some remarks about bridge probabilities. Mathematics magazine 59:153-157.

Bridge lessons are from the ACBL Bridge Series and Audrey Grant's Bridge Basics.