CS7944-001: Computational Narrative Seminar

Spring 2019
M / 11:00AM — 12:00PM (MT)
MEB (Merrill Engineering Building), Room 3490
1 Credit Hour
This class does not meet a General Education Requirement

COURSE ORGANIZATION

Instructor

Rogelio E. Cardona-Rivera
(Pronouns: he/him or they/them)

R. Michael Young

Email: rogelio@cs.utah.edu
Office: MEB #3450 and Building 72 #214
Office Hours: By appointment.

Email: young@cs.utah.edu
Office: MEB #3122 and Building 72 #216
Office Hours: TBD and by appointment.

Teaching Assistant

There is (regrettably) no teaching assistant for this course. 😢

Course Website

TBD

It is the student's responsibility to check their official email address and the Canvas website at least once daily. Failure to do so does not excuse missed deadlines.

Communication Plan

We will be using the Canvas website. The discussion forum is the preferred medium for interacting with the instructor and the teaching assistant (as opposed to emailing directly). If the question is personal (for example, a discussion about a grade on an assignment) then you should not hesitate to use the instructor's email. For any other questions, you should use the class mailing forum. The reasoning behind this is the following:

•   This gives you access to a much larger pool of potential help (if someone gives you bad advice I will respond and clarify).

•   This helps others who might be having the same problem or will run into the problem in the future (similarly, this helps me by not having to answer the same question multiple times).

COURSE INFORMATION

Description. In this seminar course we will discuss topics in and around the field of "Computational Models of Narrative" on the basis of assigned readings and in-class discussions.

Overview. The Spring 2019 offering of the Computational Narrative Seminar will primarily focus on reading and discussing papers published on topics related to *Interactive Narrative,* operationally defined as the narration that results from a player's influence on a sequence of events that constitute a trajectory through states of affairs. The selected papers will cover computational techniques from artificial intelligence and affine disciplines that advance a research agenda related to procedural interactive narrative generation.

Text. None. All assigned readings will either be made available by the instructor or by the university library.

Other Course Materials. There will be no handouts or slides available.

Course Objective. In this course, we will cover historical and state-of-the-art research projects that explore the automated generation and management of interactive narratives.

Learning Outcome. At the end of this course, you will be able to identify ongoing issues and debates surrounding the automated generation and management of interactive narratives.

Evaluation Methods and Criteria. This is a seminar-style course, which ultimately depends on in-class discussions. Students may enroll for one (1) credit. Although the University lists the course as "variable credit," the two- and three-credit options are not currently available. Students enrolled in the course are expected to sign up to lead the discussion on one or more seminar meeting. Leading the discussion means:

1. Choosing a paper and e-mailing the instructors which paper they have chosen to present before 11:59pm (MT) on the Friday prior to that next week's presentation,

2. Preparing and handing in a presentation (15-20 minutes) that summarizes the paper and its pertinent points (no later than the aforementioned Friday for the subsequent week's presentation),

3. Familiarizing yourself enough with the paper to be able to answer questions that may come up, and

4. Preparing potential discussion points if the discussion needs prompting.

If no student volunteers to lead the discussion, the paper for the subsequent week will be assigned at some point the Saturday after the aforementioned Friday.

Students are expected to be present in the seminar. The instructor will call roll throughout the semester. You may have an unexcused absence for one of those roll calls without penalty. Further unexcused absences may result in a failing grade due to the compressed nature of the seminar schedule. If you decide to attend class, *please* be punctual. Entering the classroom late disrupts everyone engaged in classroom activities. Tardiness in excess of 15 minutes will be considered an absence. For more information on the attendance policy, please consult the Course Policies, listed below.

Grade Scale. Grading for this seminar is Pass / Fail.

Teaching and Learning Methods. This course will primarily be discussion-based, with in-class discussions around material led by students.

Syllabus v.1

Schedule

The schedule is subject to change pending student interests and background. The official schedule will be kept on the course webpage, and will be updated periodically to reflect changes as the semester progresses. It is the student's responsibility to check the schedule regularly for changes. The instructors will communicate any changes in deadlines to students in a timely manner via email and/or announcements in class.

Week	Date	Readings	Presenter
1	1/17/19	Overview of Seminar: Objectives, Outcomes, How to Read a Paper, How to Present a Paper	Instructors
2	1/14/19	Riedl, M. O. and Bulitko, V. (2013). Interactive Narrative: An Intelligent Systems Approach. *AI Magazine*, 34(1):67-77	TBD
3	1/21/19	Martin Luther King, Jr. Day (No Class)	TBD
4	1/28/19	Magerko, B. Evaluating preemptive story direction in the interactive drama architecture. *Journal of Game Development* 2.3 (2007): 25-52.	TBD
5	2/4/19	Mateas, M. and Stern, A. (2002). A Behavior Language for Story-based Believable Agents. *IEEE Intelligent Systems*, 17(4):39–47.	TBD
6	2/11/19	Harris, J. and Young, R. M. (2009). Proactive Mediation in Plan-based Narrative Environments. *IEEE Transactions on Computational Intelligence and AI in Games*, 1(3):233–244.	TBD
7	2/18/19	President's Day (No Class)	TBD
8	2/25/19	Riedl, M. O., Stern, A., Dini, D. M., and Alderman, J. M. (2008). Dynamic Experience Management in Virtual Worlds for Entertainment, Education, and Training. *International Transactions on Systems Science and Applications, Special Issue on Agent Based Systems for Human Learning*, 4(2):23–42.	
9	3/4/19	Aylett, R., Louchart, S., Dias, J., Paiva, A., and Vala, M. (2005). Fearnot!–an experiment in emergent narrative. In *Proceedings of the 5th International Workshop on Intelligent Virtual Agents*, pages 305–316.	TBD
10	3/11/19	Spring Break (No Class)	TBD
11	3/18/19	Instructors out on travel for GDC (No Class)	TBD
12	3/25/19	Nelson, M. J., Mateas, M., Roberts, D. L., and Isbell, C. L. (2006). Declarative Optimization-Based Drama Management (DODM) in the Interactive Fiction Anchorhead. *IEEE Computer Graphics and Applications (Special Issue on Interactive Narrative)*, 3(26):30–39.	TBD

Week	Date	Readings	Presenter
13	4/1/19	Thomas, J. M. and Young, R. M. (2010). Annie: Automated generation of adaptive learner guidance for fun serious games. *IEEE Transactions on Learning Technologies*, 3(4):329–343.	
14	4/8/19	Evans, R. and Short, E. (2014). *Versu*: A simulationist storytelling system. *IEEE Transactions on Computational Intelligence and AI in Games*, 6(2):113–130.	TBD
15	4/15/19	Martens, C. (2015). Ceptre: A language for modeling generative interactive systems. In *Proceedings of the 11th AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*, pages 51–57.	TBD
16	4/22/19	Ramirez, A. and Bulitko, V. (2015). Automated planning and player modeling for interactive storytelling. *IEEE Transactions on Computational Intelligence and AI in Games*, 7(4):375–386.	TBD

COURSE POLICIES

In the sections that follow, you will find the policies that govern the structure of this course. The policies are specified at three different levels: Class and Classroom Policies, School/College Policies, and University Policies. For some policies, we will make reference to specific sections of the University of Utah's Regulations (https://regulations.utah.edu/academics/) that we want to emphasize. You should interpret this as an indication that special attention will be paid to that specific portion of the policy. However, you are still required to abide by the entire policy in question.

Class and Classroom Policies

Attendance and Punctuality. Attendance at class sessions is <u>required</u>; absences that are unexcused according to the University of Utah's Excused Absence Policy (Policy 6-100III-O; https://regulations.utah.edu/academics/6-100.php) and that result in late assignments or missed announcements will negatively affect students' grades. Students are expected to be present in the seminar. The instructors will call roll throughout the semester. You may have an unexcused absence for one of those roll calls without penalty. Further unexcused absences may result in a failing grade due to the compressed nature of the seminar schedule. Documented medical excuses or other excused absences will not adversely affect grades. Conference travel or other scholarly duties discussed well in advance of a missed session may be excused at the discretion of the instructor.

If you decide to attend class, *please* be punctual. Entering the classroom late disrupts everyone engaged in classroom activities. Tardiness in excess of 15 minutes will be considered an absence.

Participation Policy. Active participation in class activities and discussions is expected and ***strongly*** encouraged <u>but not explicitly evaluated</u>. Our assessment of your participation is *highly subjective* and thus will never hurt your grade, but it may help your grade: In cases where we feel that you have actually been a better student than your potential Pass/Fail would indicate — as evidenced by your participation in class — we may (at our discretion) choose to give you a

better rating than you would have otherwise received. Below, you will find our rubric for assessing participation, reproduced from the Eberly Center for Teaching Excellence's at Carnegie Mellon University (www.cmu.edu/teaching/assessment):

	Exemplary	Proficient	Developing	Unacceptable
Frequency of Participation in Class	Student initiates contributions more than once in each recitation.	Student initiates contribution once in each recitation.	Student initiates contribution at least in half of the recitations.	Student does not initiate contribution & needs instructor to solicit input.
Quality of Comments	Comments always insightful & constructive; uses appropriate terminology. Comments balanced between general impressions, opinions & specific, thoughtful criticisms or contributions.	Comments mostly insightful & constructive; mostly uses appropriate terminology. Occasionally comments are too general or not relevant to the discussion.	Comments are sometimes constructive, with occasional signs of insight. Student does not use appropriate terminology; comments not always relevant to the discussion.	Comments are uninformative, lacking in appropriate terminology. Heavy reliance on opinion & personal taste; for example: - "I love it" - "I hate it" - "It's bad"
Listening Skills	Student listens attentively when others present materials, perspectives, as indicated by comments that build on others' remarks. In other words: student hears what others say & contributes to the dialogue.	Student is mostly attentive when others present ideas, materials, as indicated by comments that reflect & build on others' remarks. Occasionally needs encouragement or reminder from instructors of focus of comment.	Student is often inattentive and needs reminder of focus of class. Occasionally makes disruptive comments while others are speaking.	Does not listen to others; regularly talks while others speak or does not pay attention while others speak; detracts from discussion; sleeps.

Food and Drink Policy. You are welcome to bring food and drink into the class insofar it is not disruptive to the rest of the class. It is my responsibility to maintain a climate conducive to thinking and learning. You are required to clean up after yourself.

Electronic Devices in Class Policy. By default, laptop use is prohibited. As indicated in a recent article by Scientific American, students are better off without a laptop in the classroom:

- Nonacademic Internet use was common among students who brought laptops to class and was inversely related to class performance. [Ravizza, Susan M., Mitchell G. Uitvlugt, and Kimberly M. Fenn. "Logged in and zoned out: How laptop internet use relates to classroom learning." Psychological science 28.2 (2017): 171-180.]

- Facebook and internet use increased when people were bored with an ongoing task. [Mark, Gloria, et al. "Bored mondays and focused afternoons: the rhythm of attention and online activity in the workplace." Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. ACM, 2014.]

- Students reported that they texted in class as a result of boredom. [Clayson, Dennis E., and Debra A. Haley. "An introduction to multitasking and texting: Prevalence and impact on grades and GPA in marketing classes." Journal of Marketing Education 35.1 (2013): 26-40.]

- People perceive fun tasks as taking less time than dull tasks (and so it is possible that time spent enjoying social media or video sites is misperceived as short). [O'Brien, Edward H., Phyllis A. Anastasio, and Brad J. Bushman. "Time crawls when you're not having fun: Feeling entitled makes dull tasks drag on." Personality and Social Psychology Bulletin 37.10 (2011): 1287-1296.]

- Social networking sites can be addictive for some people. [Ryan T, Chester A, Reece J, Xenos S. The uses and abuses of Facebook: A review of Facebook addiction. J Behav Addict. 2014;3(3):133-48.]

- Multitasking laptop users also distract their classmates, as peers with a direct view of those laptops suffer academically. [Sana, Faria, Tina Weston, and Nicholas J. Cepeda. "Laptop multitasking hinders classroom learning for both users and nearby peers." Computers & Education 62 (2013): 24-31.]

- Taking notes by hand is more effective than doing so with a laptop. [Mueller, Pam A., and Daniel M. Oppenheimer. "The pen is mightier than the keyboard: Advantages of longhand over laptop note taking." Psychological science 25.6 (2014): 1159-1168.]

Any and all other electronic devices are required to be off or silenced and stored away during the duration of the class session. There are only three exceptions to the default rule:

1. We've explicitly given permission to use laptops for some task. If we haven't but you think some task is laptop-suitable, ask. We may want you to think about it instead of blindly typing it in. When the task ends, you have to close your laptop (the screen must no longer be visible and you must cease typing).

2. You have some documentable reason that requires laptop use. If so, please discuss it with us beforehand. Also, in light of the rest of this document, we would appreciate your positioning yourself in class in a way that your laptop's screen will not distract others. Note that this does not mean you have to relegate yourself to the back; perhaps that isn't where you would like to sit! But closer to the ends of rows would help. Thanks.

3. Emergencies.

Plagiarism Software Policy. I may elect to use a plagiarism detection service in this course, in which case you will be required to submit any/all work to such a service as part of your assignment. In the event that such a software detects plagiarism, all affected students will be required to submit to further evaluation at the discretion of the instructor. Students found in violation of the University's Student Code will be subject to consequences to the fullest extent of University Regulation.

Online Submissions Policy. You are responsible for submitting all assignments with the required naming convention, correct file extension, and using the software type and version required for the assignment.

Electronic or Equipment Failure Policy. It is your responsibility to maintain your computer and related equipment in order to participate in the course. Equipment failures will not be an acceptable excuse for late or absent assignments. Outages due to University of Utah equipment failures that prohibit you from submitting an assignment will be handled on a case-by-case basis in order to ensure that you are given an adequate amount of time to submit the assignment. Such outages will be considered only if officially reported through the University of Utah's Internet Technologies website, https://it.utah.edu/help/ (at the *System Status* link, under the *Status/History* tabs).

Late Assignments / Missed Assignments Policy. Completed assignments (your seminar presentation) should be turned in no later than the Friday (11:59PM MT) after you give your talk. Late submissions will be accepted at our discretion.

Accommodation Policy. Students are expected to take courses that will challenge them intellectually and personally. Students must understand and be able to articulate the ideas and theories that are important to the discourse within and among academic disciplines. Personal disagreement with these ideas and theories or their implications is not sufficient grounds for requesting an accommodation. Accommodations requested on such grounds will not be granted. The University recognizes that students' sincerely-held core beliefs may make it difficult for students to fulfill some requirements of some courses or majors. The University assumes no obligation to ensure that all students are able to complete any major. It is the student's obligation to determine, before the last day to drop courses without penalty, when course requirements conflict with the student's sincerely-held core beliefs. If there is such a conflict, the student should consider dropping the class. A student who finds this solution impracticable may request a content accommodation from the instructor. Though the University provides, through this policy, a process by which a student may make such a request, the policy does not oblige the instructor to grant the request, except in those cases when a denial would be arbitrary and capricious or illegal. This request must be made to the instructor in writing, and the student must deliver a copy of the request to the office of the department Chair or, in the case of a single-department college, to the office of the Dean. The student's request must articulate the burden the requirement would place on the student's beliefs.

The University of Utah's Accommodations Policy can be found here: Policy 6-100III-Q; https://regulations.utah.edu/academics/6-100.php. Students are responsible for being aware of the information contained therein.

Student Names & Personal Pronouns Statement. Class rosters are provided to the instructor with the student's legal name as well as "Preferred first name" (if previously entered by you in the Student Profile section of your CIS account). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class, on papers, exams, group projects, etc. Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected. If you need assistance getting your preferred name on your UIDcard, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email bpeacock@sa.utah.edu to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.

Faculty and Student Responsibilities. Students as well as faculty are entitled to academic freedom and autonomy in their intellectual pursuits and development. Teachers must therefore treat students with courtesy and respect. They must not require students to accept their personal beliefs or opinions and must strive in the classroom to maintain a climate conducive to thinking and learning. They must not misuse their position, authority, or relationship with students. Likewise, it is the faculty's responsibility to enforce responsible classroom behaviors, beginning with verbal warnings and progressing to dismissal from class and a failing grade. Students have the right to appeal such action to the Student Behavior Committee.

School and College Policies

College of Engineering Semester Guidelines. The College of Engineering Semester Guidelines contain important dates regarding adding, dropping and withdrawing from classes as well as the College Policy regarding repeating courses. To consult the guidelines, go to: https://www.coe.utah.edu/wp-content/uploads/pdf/faculty/semester_guidelines.pdf. Students are responsible for being aware of the information contained therein.

School of Computing Policies and Guidelines. The School of Computing Policies and Guidelines represent important information that students taking courses in, or seeking degrees from, the School of Computing, must be aware of. It is important that you read, understand, and adhere to this information. To consult the policies and guidelines, go to: http://www.cs.utah.edu/socguidelines/. Students are responsible for the information contained therein.

University Policies

The Americans with Disabilities Act. The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 801-581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

If you anticipate issues related to the format or requirements of this course, please meet with me. I would like us to discuss ways to ensure your full participation in the course.

Addressing Sexual Misconduct. Title IX makes it clear that violence and harassment based on sex and gender (which Includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).

Code of Conduct. Students are required to abide by the Code of Student Rights and Responsibilities (the "Student Code") for the University of Utah. The Student Code for the

University of Utah can be found at: http://regulations.utah.edu/academics/6-400.php. Students are responsible for being aware of the information contained therein.

All students are expected to maintain professional behavior in the classroom setting, according to the Student Code (Policy 6-400), spelled out in the Student Handbook. Students have specific rights in the classroom as detailed in Article III of the Code. The Code also specifies proscribed conduct (Article XI) that involves cheating on tests, plagiarism, and/or collusion, as well as fraud, theft, etc.

Plagiarism means the intentional unacknowledged use or incorporation of any other person's work in, or as a basis for, one's own work offered for academic consideration or credit or for public presentation. Plagiarism includes, but is not limited to, representing as one's own, without attribution, any other individual's words, phrasing, ideas, sequence of ideas, information or any other mode or content of expression (Policy 6-400, Student Code).

University Resources

ASUU Tutoring Center. The ASUU Tutoring Center provides individual tutoring ($7 per hour) and group tutoring sessions ($4 per hour) for currently enrolled University of Utah students. Students can receive assistance for a wide range of subjects at a reasonable rate, thanks to the Associated Students of the University of Utah who help defray the cost of tutoring. Tutoring is very flexible. Depending on the availability of the tutor you select, appointments may be set for any time including evenings and weekends, and always at a location that is convenient for the tutor and student. For additional information call 801-581-5153 or visit the ASUU Tutoring Center in Rm. 330 SSB. http://tutoringcenter.utah.edu.

Center for Wellness & University Counseling Center. Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness - www.wellness.utah.edu; 801-581-7776; and the University Counseling Center: http://counselingcenter.utah.edu, 801-581-6826.

LGBT Resource Center. The University of Utah has an LGBT Resource Center on campus. They are located in Room 409 in the Oplin Union Building. Hours: M-F 8-5pm. You can visit their website to find more information about the support they can offer, a list of events through the center and links to additional resources: http://lgbt.utah.edu/. Please also let me know if there is any additional support you need in this class.

Office of Equity and Diversity. The University of Utah is deeply committed to enhancing the success of diverse faculty, students, and staff, as part of our broader goal to enrich the educational experiences and success of all members of our University community. We recognize that a diverse and inclusive University enriches the educational experiences of all students, and enhances our excellence as a world-class institution for 21st Century learners. The Office for Equity and Diversity is proud to lead the University's efforts to support the success and achievement of faculty, students, and staff who self-identify as African American, Latina/o or Chicana/o, Asian American, Pacific Islander, American Indian, members of the Lesbian, Gay, Bisexual, Transgender and Questioning community, and women in underrepresented fields. http://diversity.utah.edu, 801-581-7569.

Women's Resource Center. The Women's Resource Center (WRC) at the University of Utah serves as the central resource for educational and support services for women. Honoring the

complexities of women's identities, the WRC facilitates choices and changes through programs, counseling, and training grounded in a commitment to advance social justice and equality. http://womenscenter.utah.edu

The Writing Center. If writing is difficult for you, if you're new to college and don't yet feel quite able to meet college writing expectations, or if you simply would like to improve your writing, I encourage you to visit the Writing Center: www.writingcenter.utah.edu. 801-587-9122.

Veterans Center. If you are a student veteran, I want you to know that the U of Utah has a Veterans Support Center on campus. They are located in Room 161 in the Olpin Union Building. Hours: M-F 8-5pm. Please visit their website for more information about what support they offer, a list of ongoing events and links to outside resources: http://veteranscenter.utah.edu/. Please also let me know if you need any additional support in this class for any reason.

NON-CONTRACT NOTE

This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced in class and posted on Canvas under Announcements.

ACKNOWLEDGEMENTS

This syllabus is based in part on prior syllabi developed by Dr. David L. Roberts, Dr. Ashley M. L. Brown, John-Paul Ownby, Lee Sheldon, Dr. Roger A. Altizer, and Dr. Shriram Krishnamurthi