COURSE SYLLABUS

Fall 2020

Implications of the New Genetics

01:447:354:01/02

Classes begin **9/1/2020** and end on **12/10/2020**. The last day to drop this course without a "W" grade is **9/14/2020**.

Note that class is remote and synchronous (Tuesday/Thursday starting at 1:40pm). A zoom link will be emailed and posted on Canvas.

Academic Calendar Directory: https://academicaffairs.rutgers.edu/academic-calendar-directory

You are advised to retain a copy of this syllabus in your personal files for use when applying for future degrees, certifications, or transfer of credit.

INSTRUCTOR INFORMATION

Instructor: Karen Schindler

Email: schindler@dls.rutgers.edu

Office Hours: Virtual Office Hours Upon Request

Communication: Throughout the semester, I will communicate with you via either Canvas Announcements **or your** Rutgers email account**. Please review the following link for Accessing Rutgers Email:**

https://canvas.rutgers.edu/documentation/general/accessing-rutgers-email/

GENERAL COURSE DESCRIPTION

Course Description:

This course fulfills elective requirements for Biological Science and Genetics majors. I will present information from a historical perspective and review emerging genetic technologies. You will be *expected* to understand the basics of genetics and molecular biology: Mendelian inheritance, central dogma, PCR, cloning, etc. If you need review material and supplemental reading please see me. This course also satisfies the SAS Core Curriculum Goal of Contemporary Challenges (CCO). You will therefore be expected to apply materials taught in class to current social issues.

Prerequisites: 01:447:380 or 01:447:384

Course Modality:

This course is delivered **in a blended/hybrid format**. Some content will be asynchronous and some content will be synchronous via Zoom. To access the companion Canvas course site, please visit Rutgers Canvas at https://canvas.rutgers.edu/ and log in using your NetID. For more information about course

access and support contact Canvas Help at https://canvas.rutgers.edu/canvas-help/, via email at help@canvas.rutgers.edu, or call 877-361-1134.

Purpose of the Course:

Science is not separate from your life. In the 21st century, information about genetics is increasing almost exponentially and changing rapidly. Ideas that were science fiction only a few years ago are now possible. But, many social, ethical and legal systems are not advancing at the same pace and are influenced by biological ideas that are no longer valid. The purpose of the course is to provide exposure of these emerging genetic technologies, provide a platform for verbal and written critical thinking and evaluation of the technologies, and to learn to listen to and engage with peers from diverse backgrounds.

MATERIALS

Required Texts:

None.

Additional Course Resources:

A variety of digital content will be provided during the course. Digital content will be found within the **Canvas course site**. There may be additional reading assignments as student interests dictate.

Technology Requirements:

This course requires that you access online resources in the University's Canvas site. Please review the following link for Canvas Student Resources for assistance on getting started in Canvas:

https://canvas.rutgers.edu/students/

Additional Technical Requirements:

Review Rutgers' Tech Guides at: https://it.rutgers.edu/technology-guide/

You will require the following: Computer, webcam, microphone, stable internet access, MS office

STUDENT LEARNING OBJECTIVES

By fully participating in this course, you should be able to:

1. Master terms, concepts and theories behind genetic technologies and apply them to social, legal and ethical issues.
2. Research the social, legal and ethical implications of a genetic principle/technology, and describe ethical considerations from multiple sides of an issue.
3. Become knowledgeable and well-versed in current events surrounding emerging genetic technologies.
4. Critically analyze ethical scenarios using ethical principles.
5. Learn approaches in describing complex genetic technologies and their implications to a lay audience.

Teaching Procedures:

Prior to class, students will read course material and watch associated class lecture material. Comprehension quizzes will assess completion and class preparedness. Class time will be spent doing activities such as break out guided discussions, case studies, blog workshops, current event evaluations and group presentations.

Teaching Philosophy:

I learn best by doing and teaching. I provide you with the context and background for genetic technologies. I then use my teaching philosophy to facilitate your own exploration and learning through active discussions, critical thinking exercises such as blog writing and presentations, and reflection-based questioning.

Instructor Responsibilities:

I will respond to emails within 24h. Longer writing assignments will be graded within a week's time. Grades are updated on Canvas monthly.

COURSE COMPLETION REQUIREMENTS

Your success in this course depends on the following:

Active participation in class (verbal, polling, reflection answers): During class time (~3h/week)

Group projects (current events and case study): In and outside of class

Blog writing: 4 assignments, takes about 5h to research and write

Pre-class reading and viewing for quizzes: 10 classes; about 1.5h for each

GRADING

1. **Class contribution.** One of the reasons that the public often misjudges science is a lack of active dialogue on the part of scientists. My goal is to get you comfortable with discussing these hotly debated topics in a public setting (the classroom) while being respectful of opposing opinions. If you are not an active contributor, your chances of receiving an "A" are slim. You will be responsible for recording your class contribution for each class via the Google document form link that accompanies the exit ticket. You will be evaluated on **quantity and quality** of your contributions. Therefore, please provide sufficient details regarding your contribution in your response. This is described in further detail in the rubric.

Note that if you miss class, you also miss participation/contribution opportunities.

2. **Exit ticket:** At the end of each class, you will be given a question to answer using Google Forms. **This must be completed before you leave.** This serves as a way for me to gauge any misunderstandings of the material, to challenge you with a thought-provoking, no-right-or-wrong-answer type question, to take class attendance, and record class contribution details.

3. **Blogs:** You will complete blog assignments using a course Wordpress site (http://www.ruelsigenetics2020.com/). You will receive an emailed invitation that you must accept to use the site for these assignments. You will have 4 blog assignments. Submissions are due by midnight on the due date. You will receive a score sheet and feedback for each graded blog. See Files section for examples of high scoring blogs and the evaluation rubric.

4. **Reading quizzes:** Short quizzes will be given through Canvas. **You will have 1 chance to submit your answers** within 20 minutes and will receive answer feedback.

5. **Optional: Twitter account**: Find something interesting during class or on your own that is related to class? Tweet to your personal twitter account and tag **#RUELSIGEN**. This is a great way to tap into the professional Bioethics world and I highly recommend giving it a try. This is also a good way to increase your class contribution score (if you record it on your contribution form).

6. **Genetics in the news:** Topics in this course are highly relevant to the news cycle and evolve quickly. For example, every semester I have taught this course, the rules and regulations regarding 23 and Me have changed, and Crispr-mediated genome editing was not even a topic in 2013 and in 2018, a scientist edited human embryos that were used for live birth. You and your break out group will be expected to stay up-to-date on news coverage throughout the semester. For 2 class meetings you will be assigned a news article to discuss as a group, create an informative power point slide, and then write a 1-page group-based summary. Please see the instructions and rubric for more details.

7. **Group case study:** You will be assigned a group after the drop-add period. Note that you will remain seated with your group members at the same table for the rest of the semester. I will approve topics via a written **proposal due on 10/20/2020**. Use proposal form on Canvas (in Files).

   A. Presentation (60%): The group will present a 25-minute oral presentation on a case study that is a current event. There will be a 10-minute question/discussion session following your presentation. The PowerPoint presentation must be given by each group member – everyone must take a turn speaking. Given the relatively short length of the presentation, you are encouraged to select a fairly specific topic to allow time to provide a thorough examination of the topic. For example, "Genetic Testing" would likely be too broad to cover in 25 minutes. "Ethical considerations of non-invasive prenatal testing" may be a more reasonable topic.

   Your presentation will be evaluated by me (50%) and by your classmates (averaged and weighted 50%), and weighted as 60% of the case study grade.

   B. Self/Peer Evaluation (5%): Each member is to complete the 1 page self and peer evaluation question form found in Canvas Modules. This is due, along with the paper, the day of your presentation. Please keep your evaluations confidential. If there is a group member who has not been contributing to an equal extent, this is your ONLY opportunity to voice this issue so that I can consider modifying that member's group grade. I will NOT accept complaints outside of this form.

   C. Paper (35%): You will submit a 1-2 page independently written paper on your topic following the outline guidelines in Canvas Modules. **This paper is due the day of your presentation.**

Final Course Grade:

You will be assessed through multiple mechanisms. 70% of your grade will be based on individual assessment and 30% of your grade will be based on group work.

Grades in this course are weighted according to the table below.

Activity or Major Assignment	Due Date	Points or Grade %
Blog Writing Assignments		25%
Class contribution		15%
Genetics in the News		15%
Reading quizzes		10%
Peer commenting		5%
Group Case Study		30%
Total		**100%**

Grading Scale:

Grade	Range
A	100 - 90
B+	87 - 89
B	80 -86
C+	77 - 79
C	70 - 76
D+	67 -69
D	60 - 66
F	60 and Below

ACADEMIC POLICIES AND PROCEDURES

Attendance Policy:

Given the format and content of this class, attendance is mandatory. Therefore, there are no formal excused absences. Attendance will be taken during each class. If you must miss a class, this is to be reported using the University absence reporting website (https://sims.rutgers.edu/ssra/). Indicate the date and reason for absence for my records. This must be reported before the start of class.

Please note the following:

If you are absent from class, you cannot participate that day. Therefore, do not complete the class contribution form for that day. **Students will not receive credit for attendance if they are more than 15 minutes late to class.**

You are responsible for material covered in any class that you do not attend. If you miss a class, you must contact a classmate or me for the missed information. If you have a situation that might cause you to miss an entire week of class, discuss it with me *as soon as possible*.

Late Work:

Assignments turned in late will be penalized 5 points per day.

Coursework Difficulties:

Please discuss any issues that you are having in completing the coursework on time with me. I am available to talk this over with you by appointment.

Incomplete Policy:

If you are unable to complete the coursework during the semester due to some catastrophic issue, you must contact me immediately to discuss your alternatives.

Academic Honesty and Plagiarism:

Our purpose in the classroom is to seek the truth; this work requires trust and honesty between teacher and student. If we are not honest about what we know and do not know, our learning will always be impaired. Because our teaching and learning depends on this honest communication, we expect all students to understand what plagiarism is and why it is unacceptable.

Any student considering plagiarism should recognize the consequences and consider alternatives. Students uncertain about what constitutes plagiarism may request help from faculty or from appropriate University services. For information on using sources in writing, see the Identifying and Avoiding Academic Dishonesty section of the Rutgers Academic Integrity web site:

http://academicintegrity.rutgers.edu/resources-for-students/

STUDENT CODE OF CONDUCT

Students are required to adhere to the University Student Code of Conduct delineated in the Rutgers Student Affairs website Student Conduct page:

http://studentconduct.rutgers.edu/student-conduct-processes/university-code-of-student-conduct/#1495568095620-2f5ce77d-17dd

ACCOMMODATIONS

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an

intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form (https://webapps.rutgers.edu/student-ods/forms/registration).

STUDENT SUPPORT SERVICES

Academic Services:

- For academic support visit Rutgers Academics Student Support at https://www.rutgers.edu/academics/student-support
- Any student can obtain tutoring and other help at the Learning Centers on each campus. Check the website at https://rlc.rutgers.edu/
- For coaching help with writing skills and assignments visit the Writing Coaching webpage at https://rlc.rutgers.edu/student-services/writing-coaching
- Many library resources are available online. Assistance is available through phone, email, and chat. For information, check the Rutgers Libraries website at https://www.libraries.rutgers.edu/

Rutgers Student Health Services:

Rutgers Student Health Services is dedicated to health for the whole student body, mind and spirit. It accomplishes this through a staff of qualified clinicians and support staff. Services are available at several locations throughout the New Brunswick-Piscataway area. For more information visit: http://health.rutgers.edu/

Veteran Services:

Rutgers is proud to support veterans. If you are a veteran of the armed forces, please visit the Office of Veteran and Military Programs and Services website for more information: https://veterans.rutgers.edu/

TOPICS SCHEDULE

Canvas Module 1

Weeks 1&2: Introduction to the course

LEARNING GOALS:

- Understand course format and expectations
- Distinguish between ethical and social implications
- Evaluate blog styles and effectiveness
- Become comfortable with virtual discussion and activity format

CLASS MEETING	BEFORE CLASS	CLASS ACTIVITIES	DUE TODAY	ASSIGNMENTS (DUE DATE)
Date: 9/1 **Topic:** Intro Start: 1:40 End: 2:30	**Read:** Syllabus **Watch:** 1. Gene editing (20 min) 2. Intro videos (4 X 2 min) in Canvas	Ice breaker	Contribution log	Syllabus quiz (9/10)
Date: 9/3 **Topic:** Public perception and Sci literacy Start: 1:40. End: 3:00	**Read:** 1. Public perception 2. US public wary **Watch:** 1. What is science up to? (6 min)	March for Science Scientific literacy quiz	Contribution log	Syllabus quiz (9/10)
9/8: NO CLASS	Holiday schedule			Syllabus quiz (9/10)
Date: 9/10 **Topic:** Blogs and ethics Start: 1:40 End: 3:00	**Read:** 1. Fact sheet (p.1-3) 2. Social vs Ethical issues 3. Blog 1 4. Blog 2 5. Blog 3 **Listen (Optional):** 1. Ask a Bioethicist	1. Blog eval/ discussion 2. Social vs Ethical discussion 3. Case study	1. Syllabus quiz 2. Contribution log	1. Quiz 1 (9/15) 2. Blog 1 (9/24)

Canvas Module 2

Weeks 3-5: Reprogenetics

LEARNING GOALS:

- Use ART terminology and describe them to lay audience
- Connect technologies to ELS implications
- Learn diverse points of views
- Follow Reprogenetic-based current events

CLASS MEETING	PRE-CLASS ASSIGNMENTS	CLASS ACTIVITIES	DUE TODAY	ASSIGNMENTS (DUE DATE)
Date: 9/15 **Topic:** Biology behind ART Start: 1:40pm End: 2:30pm	**Read:** 1. Bioethics and embryology (p. 64-79) 2. Feuer 2013 (p. 189-195) **Watch:** 1. Lecture 1 (10 min) 2. Lecture 2 (10 min) 3. Egg Retrieval 4. ICSI 5. Embryo transfer 6. Embryo development	1. Poll and share 2. Q/A 3. E/L/S discussion	1. Quiz 1 2. Contribution log	1. Quiz 2 (9/17) 2. Blog 1 (9/24)
Date: 9/17 **Topic:** PGD and eugenics Start: 1:40pm End: 2:30pm	**Read:** 1. Silver 2000 2. Neumayr 2005 3. Ethics of PGD 4. Bioethics and Embryology (pg. 215-225) **Watch:** 1. Lecture 3 (10 min) 2. Lecture 4 (10 min) **Optional:** Read links from RU's Dr. Schoen about forced sterilization in US	1. Poll and share 2. Discuss +/- of PGD 3. Breakout debate: Silver vs Neumayr	1. Quiz 2 2. Contribution log	1. Quiz 3 (9/22) 2. Blog 1 (9/24)

Module 2 cont…

CLASS MEETING	PRE-CLASS ASSIGNMENTS	CLASS ACTIVITIES	DUE TODAY	ASSIGNMENTS (DUE DATE)
Date: 9/22 **Topic:** Mitochondrial replacement therapy Start: 1:40pm End: 2:30pm	**Read:** 1. Power of 3 2. Ethics of MRT 3. Darnovsky 4. 3 parent embryo fail **Watch:** 1. Lecture 5 (10 min) 2. Lecture 6 (10 min) 3. MRT Dr. Herbert **Listen:** 1. Kiev Success (6 min)	1. Poll and share 2. Eugenics discussion 3. Stakeholder	1. Quiz 3 2. Contribution log	1. Quiz 4 (9/24) 2. Blog 1 (9/24)
Date: 9/24 **Topic:** Germline Modification Start: 1:40pm End: 2:30pm	**Read:** 1. Crispr, the disruptor 2. Genetically engineered babies 3. Tomorrow's children 4. Research **Watch:** 1. Crispr/Cas 9 2. Lecture 7 (10 min) 3. Lecture 8 (10 min) **Listen:** 1. Inside the lab (7 min)	1. Poll and share 2. ELSI breakout	1. Blog 1 2. Quiz 4 3. Contribution log	1. Quiz 5 (9/29) 2. Blog 2 (10/8)
Date: 9/29 **Topic:** Stem Cells and Cloning Start: 1:40pm End: 2:30pm	**Read:** 1. Hyun 2010 2. Kiskinis and Eggan 3. Hyun 2014 4. Human stem cells Watch: 1. Lecture 9 (10 min) 2. Lecture 10 (10 min) 3. SCNT Listen: 1. Debate	1. Poll and share 2. Lay writing 3. ELSI breakout	1. Quiz 5 2. Contribution log	1. Blog 2 (10/8) 2. Blog 1 peer reading

Canvas Module 3

Weeks 5-6: Reprogenetics wrap up through active learning

LEARNING GOALS:

- Use ART terminology and describe them to lay audience
- Connect technologies to ELS implications
- Learn diverse points of views
- Report reprogenetic-based current events
- Evaluate case studies using ethical principles

CLASS MEETING	PRE-CLASS ASSIGNMENTS	CLASS ACTIVITIES	DUE TODAY	ASSIGNMENTS (DUE DATE)
Date: 10/1 **Topic:** Blog workshop Start: 1:40pm End: 3:00pm	**Read:** 1. Assigned blogs	1. Blog workshop	1. Contribution log	1. Blog 2 (10/8)
Date:10/6 **Topic:** Genetics in the News Start: 1:40pm End: 3:00pm	**Read:** 1. Assigned news articles	1. Current event evaluation	1. Contribution log 2. Current event advertorial	1. Blog 2 (10/8)
Date: 10/8 **Topic:** Case studies Start: 1:40pm End: 3:00pm	**Read:** 1. Case studies 2. Associated questions	1. Case study evaluation and discussion	1. Blog 2 (10/8) 2. Contribution log	1. Blog 2 peer commenting (10/15) 2. Blog 3 (10/22) 3. Quiz 6 (10/13)

Canvas Module 4

Weeks 7-10: Genetics and Genomics

LEARNING GOALS:

- Use genomics terminology and describe them to lay audience
- Connect technologies to ELS implications
- Learn diverse points of views
- Follow Genomics-based current events

CLASS MEETING	PRE-CLASS ASSIGNMENTS	CLASS ACTIVITIES	DUE TODAY	ASSIGNMENTS (DUE DATE)
Date: 10/13 **Topic:** Direct to consumer genetic testing Start: 1:40pm End: 2:30pm	**Read:** 1. DTC testing 2. NYT DTC Labs 3. DTC Genetics 4. What's next? **Watch:** 1. Lecture 1 (10 min) 2. Lecture 2 (10 min) 2. 23andMe results	1. Poll and share 2. ELSI breakout	1. Quiz 6 2. Contribution log	1. Quiz 7 2. Blog 3 (10/22)
Date: 10/15 **Topic:** Precision medicine and privacy Start: 1:40pm End: 2:30pm	**Read:** 1. Cancer Genomics 2. NEJM Precision Medicine 3. The genome hacker Watch: 1. Lecture 3 2. Lecture 4 3. Lecture 5 4. PGP 5. Hacking	1. ELSI breakout 2. Precision medicine search	1. Quiz 7 2. Contribution log 3. Blog 2 peer commenting	1. Quiz 8 2. Blog 3 (10/22)
Date: 10/20 **Topic:** Specimen and sequence ownership: Henrietta Lacks Start: 1:40pm End: 3:00pm	**Read:** 1. Biospecimen policy 2. Deal done 3. The sequel 4. Skloot website (explore and learn) **Watch/Read (Optional):** The Immortal Life of Henrietta Lacks (HBO)	1. Live reading 2. ELSI breakout	1. Quiz 8 2. Contribution log	1. Quiz 9 2. Blog 3 (10/22)

Module 4 cont…

CLASS MEETING	PRE-CLASS ASSIGNMENTS	CLASS ACTIVITIES	DUE TODAY	ASSIGNMENTS (DUE DATE)
Date: 10/22 **Topic:** DIY science diagnosis Start: 1:40pm End: 2:30pm	**Read:** 1. Life Hackers 2. DIY Crispr 3. Genspace website (explore and learn) **Watch:** 1. Genspace 2. Genspace 2 (scroll down) 3. DNA portrait 4. Bea the film 5. Lecture 6	1. Poll and share 2. ELSI Breakout	1. Blog 3 2. Contribution log 3. Final project proposal	1. Quiz 10 2. Blog 4 (11/5) 3. Blog 3 peer commenting (10/29)
Date: 10/27 **Topic:** DNA Patents Start: 1:40pm End: 2:30pm	**Read:** 1. Williams Biotech 2. Allen 2001 3. Perkel 2013 4. Intellectual property 5. Myriad data fight **Watch:** 1. In the family 2. Take back our genes 3. Who owns your body 4. Lecture 7	1. ELSI breakout	1. Quiz 10 2. Contribution log	1. Blog 4 (11/5)
Date: 10/29 **Topic:** Genetic Counseling **TBA**	**TBA**	**TBA**	1. Contribution log 2. Blog 3 peer commenting	
Date: 11/3 **Topic:** Twitch Start: 1:40pm End: 2:10pm	**Read:** 1. Huntington NYT **Watch:** 1. Twitch (link to come)	Discussion	1. Contribution log	

Canvas Module 5

Weeks 10-12: Genetics and Genomics wrap up through active learning

LEARNING GOALS:

- Use genomics terminology and describe them to lay audience
- Connect technologies to ELS implications
- Learn diverse points of views
- Report genomics-based current events
- Evaluate case studies using ethical principles

CLASS MEETING	PRE-CLASS ASSIGNMENTS	CLASS ACTIVITIES	DUE TODAY	ASSIGNMENTS (DUE DATE)
Date: 11/5 **Topic:** Group project Start: 1:40pm End: 3:00pm	1. Coordinate plans with group on final project	1. Breakout with project group	1. Contribution log 2. Blog 4	1. Read assigned blog 4
Date: 11/10 **Topic:** Blog workshop Start: 1:40pm End: 3:00pm	**Read:** 1. Assigned blogs	1. Blog workshop	1. Contribution log	1. Current event article
Date:11/12 **Topic:** Genetics in the News Start: 1:40pm End: 3:00pm	**Read:** 1. Assigned news articles	1. Current event evaluation	1. Contribution log 2. Current event advertorial	
Date: 11/17 **Topic:** Case studies Start: 1:40pm End: 3:00pm	**Read:** 1. Case studies 2. Associated questions	1. Case study evaluation and discussion	1. Contribution log	

Canvas Module 6

Weeks 12-15: Final projects

LEARNING GOALS:

- Connect technologies to ELS implications
- Learn diverse points of views
- Evaluate case studies using ethical principles

CLASS MEETING	PRE-CLASS ASSIGNMENTS	CLASS ACTIVITIES	DUE TODAY	ASSIGNMENTS (DUE DATE)
Date: 11/19 **Topic:** Group project Start: 1:40pm End: 3:00pm		1. Present/Evaluate	1. Contribution log 2. Evaluation rubric	
Date: 11/24 **Topic:** Group project Start: 1:40pm End: 3:00pm		1. Present/Evaluate	1. Contribution log 2. Evaluation rubric	
Date: 11/26 **No class Thanksgiving Holiday**				
Date: 12/1 **Topic:** Group project Start: 1:40pm End: 3:00pm		1. Present/Evaluate	1. Contribution log 2. Evaluation rubric	
Date: 12/3 **Topic:** Group project Start: 1:40pm End: 3:00pm		1. Present/Evaluate	1. Contribution log 2. Evaluation rubric	

CLASS MEETING	PRE-CLASS ASSIGNMENTS	CLASS ACTIVITIES	DUE TODAY	ASSIGNMENTS (DUE DATE)
Date: 12/8 **Topic:** Group project Start: 1:40pm End: 3:00pm		1. Present/Evaluate	1. Contribution log 2. Evaluation rubric	
Date: 12/10 **Topic:** Group project Start: 1:40pm End: 3:00pm		1. Present/Evaluate	1. Contribution log 2. Evaluation rubric	

Supplemental instructional materials found in Canvas "Modules" folder

1. What to do if adding course
2. Examples of good and bad blog entries
3. Examples of good and bad case study project topics
4. Student evaluation grading forms
5. Group numbers and members' names (after drop/add)

Letters of recommendation

I will only write letters of recommendation for students that I know ***VERY*** well. These individuals typically:

(a) participate regularly in class and attend office hours,

(b) talk Genetics with me outside of the classroom,

(c) are Genetics aficionados (i.e. **above a 95%** in the course), and

(d) are carefully tracking their contribution to the class so that we can use specific examples in the letter.

Once I agree to write a letter, I will send you detailed instructions**. It will require some writing on your part.** Advance notice is required, and at minimum, I will need 3 weeks time to craft an effective letter.