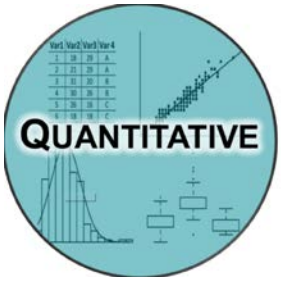
Honors Forum – Applied Sciences

Spring 2017

HONORS 3A

Section #52167



Instructor: Dr. John Heathcote **Class Times:** F 12:00-1:50pm, CCI-207
Office: FEM-1B (in the math study center)
Phone: (559) 638-0300 ext. 3215
e-mail: john.heathcote@reedleycollege.edu

Office Hours: T 1:00-1:50 pm
Th 12:00-1:50pm

These are my official office hours, but I am available at many other times as well. You can find me in my office most mornings before noon. If you see me in there, feel free to come by with any question or concern that you have!

Prerequisite: Acceptance into the Honors Program or Instructor Approval

Welcome to the Applied Sciences Honors Forum!

I want to welcome you to Honors 3A! This is an exciting semester, as it is the very first time that we have offered this class! This is going to be a fun and interesting course. We will choose some "contemporary issues" in which you are interested and use those to develop our research questions. We will then work together to do our research and the analysis that will coincide with your computational courses. We have some challenging work ahead of us, but we will do it together!

Catalog Description:
An interdisciplinary investigation of a contemporary issue through the perspective of a computational discipline (e.g., mathematics, statistics, accounting, etc.). Content will vary each semester as determined by student research interests. Enrolled students will be required to present their research to an Honors committee as the culminating portion of the course.

No Required Textbook

Grading:

40%	Weekly Progress Grade
10%	Research Symposium Proposal
25%	Final Project Report
25%	Final Project Presentation

Weekly Progress Grade:
The major thrust of this course is the development of a research report that combines computational analysis with academic research. Each week, we will meet together as a class to help each other as we continue on our quest to complete this project. On certain weeks, there will be assignments that will guide you toward reaching this goal. On other weeks, you may simply need to report on your own personal progress. Each week, you will be earning a grade based upon your progress on the project.

Research Symposium Proposal:
The Bay Area Honors Research Symposium will be held on the campus of Stanford University on Saturday, May 6, 2017. This course matches perfectly with this opportunity to present academic research. One assignment for this course will be to submit a proposal for a research presentation at the research symposium. It would be great if we could get some of you accepted for this opportunity! That would be a wonderful experience for you and one that you can brag about for a long time!

Final Project Report and Presentation:
The culmination of your work will be a written report and a presentation of your findings. The details of what will be required of your final report will be defined during the semester. You will want to take plenty of time editing the report to make it readable and free of errors. We will go through a process of submitting a draft report and making improvements. In addition, you will present your research findings to the class and to an honors committee before the end of the semester.

Grading Scale:

90-100%	A
80-89.9%	B
70-79.9%	C
60-69.9%	D
<60%	F

Accommodations for Students with Disabilities:
If you have a verified need for an academic accommodation or materials in alternate media (i.e., Braille, large print, electronic text, etc.) per the Americans with Disabilities Act (ADA) or Section 504 of the Rehabilitation Act, please contact me as soon as possible.

Add Date:	Friday, January 27	Last day to add a course
Drop Date:	Friday, March 10	Last day to drop this course
Holidays:	Monday, January 16	Martin Luther King Jr. Day
	Friday-Monday, Feb. 17-20	Presidents' Day Holidays
	Monday-Friday, April 10-14	Spring Recess Holidays
Final:	Friday, May 19, 12:00-1:50 pm	

Tentative Course Schedule:

Date:	Activity:
1/13	Introductions, Interests, and Computational Courses
Wednesday, 1/18	*10:30AM, Adam Steltzner Town Hall Lecture*
1/20	Research Themes and Teams / Hypotheses / Sources
1/27	Writing Research Proposals
2/3	Research Symposium Proposal Drafts are Due
2/10	Research Symposium Proposals are Due
2/17	Presidents' Day Holiday
2/24	Research Progress Reports
3/3	Research Progress Reports
3/10	Research Progress Reports
3/17	Research Progress Reports
3/24	Research Progress Reports
3/31	Research Progress Reports
4/7	**Draft Reports are Due**
4/14	Spring Break Holiday
4/21	Review Draft Reports
4/28	**Second Draft Reports are Due**
5/5	Class Presentations
Saturday, 5/6	*Trip to Bay Area Consortium Honors Research Symposium*
5/12	Class Presentations
5/19	Final Exam Week – Complete Presentations, as necessary

COURSE OUTCOMES:
Upon completion of this course, students will be able to:

1. place a designated topic within a computationally-based academic context.

2. understand how different disciplines can contribute information to a common research question.

COURSE OBJECTIVES:
In the process of completing this course, students will:

1. experience an integrated academic atmosphere in an effort to stimulate intellectual curiosity and university-level discussion on a particular topic or theme.

2. build a background in an applied science that is broad enough to contribute to a multi-discipline research project.

3. develop interdisciplinary hypotheses and questions about a topic with guidance from the instructor.

4. synthesize information and knowledge using skills obtained from a computational discipline.

5. practice critical thinking skills in evaluating and presenting research.

6. revise "first thoughts" or original hypotheses in light of deeper research and in collaboration with the instructor, classmates and experts in the field.

7. lead/participate in discussions to investigate questions and concerns regarding the identified research topic.

8. write appropriately documented essays which define, evaluate, interpret, and argue interdisciplinary topics.