HONORS COMMITTEE Agenda

Monday, September 24, 2018 L-201 2:00PM

Type of Meeting: Regular				
Note Taker:				
Please Review/Bring: Agenda Packe	et			
Committee Members:				
Tamira Palmetto Despain, Faculty C	o-Chair			
Vejea Jennings, Faculty Co-Chair				
Dr. Irit Gat, Division Dean				
Rae Agahari, Arts & Humanities				
David L. Adams, Career Tech Education				
Susan Knapp, Counseling				
VACANT – Health and Safety Sciences				
Angela Koritsoglou, Rhetoric & Literacy				
Kimberly Thomas, Library Representative				
Dr. Mark McGovern, Math Sciences Engineering				
Pavinee Villapando, Math Sciences Engineering				
Dang Huynth, Math Sciences Engineering				
Dr. Matthew Jaffe – Social and Behavioral Sciences				
John Vento, Ex-Officio				
TAP Representative				
Alpha Iota/ASO Representative				
Items	Person	Action		
I. Call to Order and Roll Call				
II. Opening Comments from	T Palmetto Despain			
the Chair	V Jennings			
III. Open Comments from the				
Public				
IV. Approval of Minutes	ALL	a. May 21, 2018 Meeting (attachment)		
		b. August 27, 2018 Meeting (attachment)		
V. Old Business				
VI. Discussion Items	T Palmetto Despain	a. Math 115 Honors Option Proposal Approval – Tony		
		Lam (attachment)		
		b. Spring 2018 Schedule		
		c. Honors Option Faculty List and Classes		
		d. Honors Requirements for Incoming Freshman		
		2019 (No English/Math Assessment)		
		e. Honors Student Research Symposium/Professional		
		Milestones		
VII. Action Items		a. Math 115 Honors Option Proposal Approval – Tony		
		Lam		
		b. Honors Option Faculty List and Classes		
		c. Honors Requirements for Incoming Freshman 2019		
		(No English/Math Assessment)		
		d. Honors Student Research Symposium/Professional		
		Milestones		

VIII. Other Business	
IX. Adjournment	



To conform to the open meeting act, the public may attend open sessions

1. CALL TO ORDER AND ROLL CALL

Members present:

- Tamira Palmetto Despain, Faculty Co-Chair
- Vejea Jennings, Faculty Co-Chair
- Dr. Irit Gat, Division Dean
- Rae Agahari, Arts & Humanities
- Dr. Mark McGovern, Math Sciences Engineering
- David L. Adams, Career Tech Education
- Angela Koritsoglou, Rhetoric & Literacy
- Kimberly Thomas, Library Representative
- Pavinee Villapando, Math Sciences Engineering
- Dang Huynth, Math Sciences Engineering
- Dr. Matthew Jaffe Social and Behavioral Sciences
- John Vento, Ex-Officio

Members absent:

• Susan Knapp, Counseling

Guests:

- Tony Lam
- 2. OPENING COMMENTS FROM THE HONORS COMMITTEE CHAIR a. none
- OPEN COMMENTS FROM THE PUBLIC b. none

4. APPROVAL OF MINUTES

- May 21, 2018 Meeting (attachment)
 - Tables for next meeting
- August 27, 2018 Meeting (attachment)
 - Motion to approve August 27 meeting minutes
 - Motion to approve
 - Motion was seconded.
 - Open for Discussion no discussion.
 - Motion passed unanimously.
 - Motion adopted.

6. OLD BUSINESS

a. none

7. DISCUSSION ITEM

- Math 115 Honors Option Proposal Approval Tony Lam
 Tony Lam present his Honors Option Proposal
- Spring 2018 Schedule
- Palmetto and Jennings presented the 2018 Spring schedule
- Honors Option Faculty List and Classes
 - The committee discussed whether or not faculty approved to offer a specific Honors option in one course are eligible to offer any Honors option in their disciple without presenting it to the committee since they have already been approved. After discussion, it was determined that if a faculty member has already been approved to teach an Honors option in one course, they can teach one in another course without Honors Committee approval.
- Honors Requirements for Incoming Freshman 2019 (No English/Math Assessment)
 - With the upcoming changes with the implementation of AB705, our Honors criteria will need to change. This discussion will be ongoing.
- Honors Student Research Symposium/Professional Milestones
 - Honors course and Honors options students would have the opportunity to present their research alongside faculty at the Professional Milestones event.

8. ACTION ITEMS

- Math 115 Honors Option Proposal Approval Tony Lam
 - Motion to approve Math 115 Honors Option Proposal
 - Motion to approve
 - Motion was seconded.
 - Open for Discussion no discussion.
 - Motion passed unanimously.
 - Motion adopted.
- Honors Option Faculty List and Classes
- Motion to approve Honors Option Faculty List and Classes
 - Motion to approve
 - Motion was seconded.
 - Open for Discussion no discussion.
 - Motion passed unanimously.
 - Motion adopted.
- Honors Requirements for Incoming Freshman 2019
 - (No English/Math Assessment)
 - Discussion will continue.
- Honors Student Research Symposium/Professional Milestones
 - Motion to approve Honors Student Research at the Symposium/Professional Milestones
 - Motion to approve
 - Motion was seconded.
 - Open for Discussion no discussion.
 - Motion passed unanimously.

Approved: October 22, 2018 Honors Committee Meeting

• Motion adopted.

8. OTHER

9. ADJOURNMENT (3:00p.m.)

NON-DISCRIMINATION POLICY

Antelope Valley College prohibits discrimination and harassment based on sex, gender, race, color, religion, national origin or ancestry, age, disability, marital status, sexual orientation, cancer-related medical condition, or genetic predisposition. Upon request, we will consider reasonable accommodation to permit individuals with protected disabilities to (1) complete the employment or admission process, (b) perform essential job functions, (c) enjoy benefits and privileges of similarly-situated individuals without disabilities, and (d) participate in instruction, programs, services, activities, or events.



INSTRUCTOR USE ONLY: By agreeing to offer an honors option to honors students, you agree to fulfill the high standards of the honors program and to sign all appropriate paperwork by the deadline in order for the student to get honors credit for your course. Your project must be approved by the honors coordinator/committee. The following criteria will help us to determine if the project meets honors option criteria and standards. Please be very detailed and specific in your responses. The form below will help you to design an appropriate proposal for consideration. Please fill out completely and with ample details. You only need to fill out this form once for a particular course. Honors Option projects do not figure into the grade for the course, but they should be done to a high standard. If an instructor wants to grade the project, CREDIT or NOCREDIT should be used. Students need not be earning an "A" in a course to do an honors option; however, their work in general must be honors quality. Instructors reserve the right to deny the opportunity of an honors option to any student in any course.

Math 115: Statistics - Fall 2018 - Dr. Tony Lam

Check which of the following honors objectives will be met by the proposed course?

- _X__Option will provide content about the history or background of the field being studied.
- _X__Option will show an awareness of some of the field's major theories or current trends
- _X__Option will require students to perform a case study, field experience, or other application.
- _X__Option utilizes research methods including proper documentation for the discipline.
- _X__Option will help students to demonstrate critical thinking and/or meta-cognitive abilities.
- 1. Please provide an overview of the proposed option. Be sure to show how it differs from what other students do in your course.

In Math 115, the assignments for students involve homework questions, quizzes, and exams. These assess their ability to identify and execute specific statistical tools. Data sets are curated, but they are real data. However, students focus on the method rather one piece at a time. In other words, the assignments jump from various real world scenarios with little return as the tools vary. The reason for this is because there are no quintessential data set relevant to every learned method. Also, the students do not generate a data set individually.

For the Math 115 Honors Option, Clarence Tagarino would be expected perform a full statistical study: select a topic for analysis, plan to collect data, implement the plan, analyze the results, apply appropriate statistical inferences, and write a report to interpret and summarize the results (or null-



results and offer ways to improve the study). Such a report would generate a portfolio: 1-2 pages for the planning, 1-4 for the descriptive statistics, 1-4 for the inference, and 4-6 for the interpretation and summary. Clarence has tentatively chosen nutrition as a topic of study. Literature review and research related to the topic is expected to understand potential pitfalls and best practices. It may be necessary to research IRB practices for data collection, which is not even mentioned in the Math 115 course. Research into a particular statistician (or mathematician) will also be expected for perspective, with a 1-2-page research essay on why that person is relevant to the methods used. Inference would preferably use a technique not usually covered in Math 115 (like multiple sample comparisons or non-linear regression). Then, if time permits (data collection takes time), then the student may summarize the results in poster form and give a 10-minute presentation, either to the class or to math faculty interested in the work of our students.

2. Describe how the option will strive for a high degree of student participation and involvement.

Clarence will collect data from our statistics class (about 30 students) and randomly collect the same data via surveys from one or more AVC class(es) for statistical comparison. Otherwise (if not IRB compliant), data will be collected from reliable sources researched. The initial topic of interest is selected with the student interests in mind, with the possibility of changing before the scheduled time for analysis. A poster or presentation will summarize the semesters work of the statistical study. The data collection process takes considerable involvement, not only for the student but also any subjects participating in the survey.

3. List the specific meeting dates, deadlines and tasks.

Ongoing:

Meet at least once per week for 30-60 minutes (ideally twice for 60-120 minutes) to discuss progress and contribute to portfolio. (Mondays and Wednesdays)

9/13: Clarence and myself met to outline and agree on project.

Start of week 5: Agree on outline and schedule

Deadline for project topic: 9/20

Week six through seven: Generate survey questions and revisions to questions, research IRB compliance for surveys. (Planning stage for portfolio)

10/7: Planning assignment turned into portfolio.

Week eight: Collect data and begin data exploration.



Week nine: Complete data exploration and report on findings for portfolio.
10/21: Data exploration turned into portfolio.
Week ten: Research mathematician/statistician.
10/28: Perspective assignment submitted into portfolio.
Week eleven through thirteen: Apply statistical inference on data.
11/11: Inference portion submitted to portfolio.
Week fourteen: Completes portfolio
11/18: Portfolio completed.

Up to three of the following, if time allows: Presentation on 11/30, 12/3, or poster due by 12/3.

4. What activities, assignments, or readings will provide greater depth and breadth of subject matter?

Active involvement in data collection and summarization generates appreciation to the difficulties of statistics – the best intended data may have problems and we must assess if that is a good representation of the population. Research into a statistician/mathematician appeals the historical perspective.

Tentatively (but with strong interest), the topic of the project is nutrition and the population of interest is the students at AVC (Are students nourished, etc?) The mathematician of interest is Thomas Bayes, whose discovery of the named Bayes' Theorem developed into Bayesian statistics, one of the most widely used statistical theory and applications in today's world. This is an appropriate extension of statistics – although some 20th century statistics is used by other students, this one is even more modern. Lastly, the use of a single data set develops a personal connection to the subject matter via immersion. It is my impression that other students do not naturally develop this "investment" in a single data set.

5. Describe writing assignments and discuss how the course will foster critical thinking.

The writing assignments involve are expected to have an analysis of what works and what doesn't work. A technological tool is necessary in statistics. While the software R is currently the standard in today's academic world, all students already has access to StatCrunch. If time, the Clarence would receive assistance in processing data through R, but he will be able to at least generate StatCrunch outputs and embed them into writing assignments.



Planning involves the metacognitive idea of foreseeing potential pitfalls with data collection and must investigate how to plan around them. The exploration phase puts Clarence to decide the most appropriate analytical tool to use for inference. This synthesizes identifying various measurement levels of data together with implementing statistical inferences or models. The idea behind Bayesian Statistics has an element of "updating our prior knowledge" (I avoid going into technical detail.) It is unknown at this time what the data will reveal, so Clarence will make judgements and interpretations that drive decisions. The conclusion for the portfolio describes how he used critical thinking to make the choices, and from there, suggest follow up research.

6. Explain research opportunities, documentation style, and/or how primary/secondary sources will be utilized.

Research into IRB compliance is necessary before collecting data. In addition, with nutrition as the topic of interest, research opportunities present themselves by asking how nutritionists would phrase survey questions. In the rare case that we would be unable to collect data through a survey, documentation of how data was collected from other sources requires citation. This would follow from SIAM (Society of Industrial and Applied Mathematics) standards.

Regarding inference techniques, the utilization is free in nature. (Nobody owns the Central Limit Theorem, Confidence intervals are not proprietary, etc.)

7. Overall, please describe how this honors option by contract project will benefit the honors student.

Clarence Tagarino will gain an appreciation into the effort exerted into a statistical study. Hopefully the worst frustrations will not be encountered (non-response generates missing data and other effects may steer the results to a bias). These are still redeemable and have value in the post-collection analysis. They also build character. Secondly, his critical thinking is utilized by making choices for analysis. This goes beyond identification because a researcher often times is exploring for the first time, independently, and there is "no correct way." He may even discover a more interesting metric! Next, because the project involves a real world application (i.e., the data topic, nutrition, is outside of mathematics) and the aim is to find one or more other AVC classes to generate data, he benefits from cross-disciplinary collaboration and study. Fourth, whether it is StatCrunch or R, Clarence will acquire a technological skill very relevant in both industry and



academia. Lastly, in the rare case data collection goes awry or the statistical inference produce non-results, this is actually a good experience to go through. Failure is part of life, and in statistics, we may fail. There is value in how we respond to failure.