

# Course Syllabus

Course Number: DS 402 Course Title: Digital Humanities Department Name: Natural Sciences and Mathematics College/School/Division Name: Chaminade University of Honolulu Term: Fall 2020 Course Credits: 3 Class Meeting Days: Tuesdays and Thursdays Class Meeting Hours: 2:40 – 4:10pm Class Location: Tredtin Hall, Room DSC Instructor Name: Junghwa Suh, DArch and Laura Tipton, PhD Email: junghwa.shu@chaminade.edu, laura.tipton@chaminade.edu Phone: (Dr. Suh) 808-739-8590, (Dr. Tipton) 808-735-4804 Office Location: (Dr. Suh) Eiben 208, (Dr. Tipton) Tredtin DSC 3 Office Hours: (Dr. Tipton) by appointment via Zoom, (Dr. Suh) by appointment via Zoom

## 1. University Course Catalog Description

This course will explore emerging forms of humanities scholarly production and digital methodologies, such as digital exhibits, digital mapping, text analysis, information visualization, and network analysis.

## 2. Course Overview

This course will focus on humanizing data and data about humans. Through this lens, we will explore how to analyze non-numeric data, including literature and social networks, as well as how to appropriately and effectively present the data. The course will culminate in a semester-long project on a topic that aligns with the student's interests.

## 3. Program Learning Outcomes

Upon completing the B.S. degree program in Data Science Analytics and Visualization the student will demonstrate the following:

- 1. Source, describe and curate large data sets ('Big Data') that may not be amenable to traditional hardware and software, and conventional statistical analysis including domain and file specific metadata and the tools built around alternatives to tabular relations that allow the use of multimodal data;
- 2. Identify, describe and apply foundational mathematical and statistical concepts and operations, including the application of tools such as R, SQL and Python languages, that underlie data sourcing, management, analysis and interpretation;
- 3. Develop and implement approaches for effective data translation, dissemination and communication between domains, stakeholders and the public;
- 4. Identify and apply basic data modeling, predictive models and visualizations to support decision-making;
- 5. Integrate an awareness of ethical issues and collective standards to positively influence the application of data science to service, justice and peace in working towards solutions for societal problems;
- 6. Explain, plan and execute data science tasks within multidisciplinary teams;
- 7. Execute a domain-specific capstone project addressing a stakeholder-generated use case.
- 4. Course Learning Outcomes and Linkage to Program Learning Outcomes

At the conclusion of DS 100, students will:

Course Learning Outcomes	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7
1. Identify and describe digital exhibits.	Х				Х		
2. Identify and describe digital mapping.	Х				Х		

3. Explain the text analysis process and tools.	Х	х		х	х	
4. Explain the properties of effective information visualization.			Х		Х	
5. Identify and describe network analyses.	Х	х		х		

5. Course Prerequisites

# DS100 or DS101 and CS201 or CS202

## 6. Required Learning Materials

- R and R Studio available for free at <u>https://cran.r-project.org/</u> and <u>https://rstudio.com/</u>
- Text Mining with R by Julia Silge & David Robinson available for free at <a href="https://www.tidytextmining.com/">https://www.tidytextmining.com/</a>
- Affinity Designer software available for purchase at <a href="https://affinity.serif.com/en-gb/designer/">https://affinity.serif.com/en-gb/designer/</a>
- Any additional materials will be provided on Canvas as needed

## 7. Course Website:

datascience.chaminade.edu

#### 8. Technical Assistance for Canvas Users:

Search for help on specific topics at <u>help.instructure.com</u>. <u>Chat live with Canvas Support 24/7/365</u>. Watch this <u>video to get you started</u> with online guides and tutorials. Contact the Chaminade IT Helpdesk for technical issues: <u>helpdesk@chaminade.edu</u>, or call (808) 735-4855

#### 9. Assessment.

Communication	5 points
Project proposal	15 points
Project update	25 points
Project presentation	35 points
3D model mini-project	10 points
Final reflection paper	10 points
Total	100 points

Grading will be based on student points earned from communication, reflection paper, mini project and a semester-long project. A reflection paper is one that looks at personal goals as a data scientist and the role that (digital) humanities plays in your future. Presentations will be developed throughout the semester, building on a proposal and mid-semester update.

## 10. Grading Scale

Letter grades are given in all courses except those conducted on a credit/no credit basis. They are interpreted as follows:

A 90-100% initiative	90 points or more: Outstanding scholarship and an unusual degree of intellectual
B 80-89%	80-89 points: Superior work done in a consistent and intellectual manner
C 70-79%	70-79 points: Average grade indicating a competent grasp of subject matter
D 60-69%	60-69 points: Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite course work.
F <60%	59 points or less: Failed to grasp the minimum subject matter; no credit given

# 11. Coure map link:

https://docs.google.com/presentation/d/1PqSyRwY8v7FdspvS49q807Zc18M9TP9EOnTiVmMLF3s/edi t#slide=id.g1fff937dbc\_0\_188

12. Alignment of Natural Sciences Courses with Marianist and Hawaiian values of the University.

The Natural Sciences Division provides an *integral, quality education:* sophisticated integrative course content taught by experienced, dedicated, and well-educated instructors.

- We *educate in family spirit* every classroom is an *Ohana* and you can expect to be respected yet challenged in an environment that is supportive, inclusively by instructors who take the time to personally get to know and care for you.
- We *educate for service, justice and peace*, since many of the most pressing global issues (climate change, health inequity, poverty, justice) are those which science and technology investigate, establish ethical parameters for, and offer solutions to.
- We *educate for adaptation and change*. In science and technology, the only constant is change. Data, techniques, technologies, questions, interpretations and ethical landscapes are constantly evolving, and we teach students to thrive on this dynamic uncertainty.

The study of science and technology can be formative, exploring human creativity and potential in the development of technologies and scientific solutions, the opportunity to engage in the stewardship of the natural world, and the opportunity to promote social justice. We provide opportunities to engage with the problems that face Hawai'i and the Pacific region through the Natural Sciences curriculum, in particular, those centered around severe challenges in health, poverty, environmental resilience, and erosion of traditional culture. The Marianist Educational Values relate to Native Hawaiian ideas of *mana, na'auao, ohana, aloha* and *aina*. We intend for our Natural Sciences programs to be culturally-sustaining, rooted in our Hawaiian place, and centered on core values of *Maiau*, be neat, prepared, careful in all we do; *Makawalu*, demonstrate foresight and planning; `*Ai*, sustain mind and body; *Pa'a Na'au*, learn deeply.

## 13. Additional departmental and university policies

## 13.1. Late Work Policy

Requests for extensions due to extenuating circumstances (medical problems, for example) will be considered but in general work received after the deadline will not be graded. Computer problems are not an excuse for late work.

## 13.2. Grades of "Incomplete"

Students and instructors may negotiate an incomplete grade when there are specific justifying circumstances. An Incomplete Contract (available form the Divisional Secretary and the Portal) must be completed. When submitting a grade the "I" will be accompanied by the alternative grade that will automatically be assigned after 90 days. These include IB, IC, ID, and IF. If only an "I" is submitted the default grade is F. The completion of the work, evaluation, and reporting of the final grade is due within 90 days after the end of the semester or term. This limit may not be extended.

## 13.3. Writing Policy

Paper requirements and formatting will be discussed during the course when the assignment is given.

## 13.4. Instructor and Student Communication

Questions for this course can be emailed to the instructors at <u>junghwa.suh@chaminade.edu</u> and <u>laura.tipton@chaminade.edu</u>. Online, in-person, and phone conferences can be arranged. Response time will take place up to 3 days.

The University provides a Chaminade email address for all students. Official Chaminade communications will be sent to the students' Chaminade email address and instructors will use only this email to communicate with students. It is the responsibility of the student to check their email frequently. Report email-related problems to the Helpdesk at 808-735-4855 or helpdesk@chaminade.edu

# 13.5. Cell phones, tablets, and laptops

*Music Devices and Cellular Phones:* Unless specifically permitted by your instructor, use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes, as it is discourteous and may lead to suspicion of academic misconduct. Students unable to comply will be asked to leave class. Out of consideration for your classmates, please set your cell phone to silent mode during class. Students are encouraged to bring laptops or tablets to class as the instructor will assign online activities and readings that will require the use of a laptop or tablet. Laptops and tablets should not be misused, such as checking distracting websites. Use your best judgment and respect your classmates and instructor.

#### 13.6. Disability Access

If you need individual accommodations to meet course outcomes because of a documented disability, please speak with me to discuss your needs as soon as possible so that we can ensure your full participation in class and fair assessment of your work. Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from the Counseling Center by the end of week three of the class, in order

for instructors to plan accordingly. If a student would like to determine if they meet the criteria for accommodations, they should contact the Kokua Ike Coordinator at (808) 739-8305 for further information (ada@chaminade.edu).

## 13.7. Title IX Compliance

Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As faculty members, we are interested in promoting a safe and healthy environment, and should we learn of any sexual misconduct, physical and/or psychological abuse, we must report the matter to the Title IX Coordinator. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting Campus Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services. Should you want to speak to a confidential source you may contact the following:

• Chaminade Counseling Center 808 735-4845.

• Any priest serving as a sacramental confessor or any ordained religious leader serving in the sacred confidence role

#### 13.8. Attendance Policy

If you are not feeling well, please do not come to campus! Please email Dr. Tipton and Dr. Suh to let us know that you will not be attending. All lectures will be posted online and participation in online components will be considered attendance. Repeated unexcused absences without email notification may lead to a grade reduction for the course.

When we have any live session (either in-class or Zoom meeting), the class will begin at the assigned class time from 2:40 pm to 4:10 pm. Otherwise, you will be asked to go through learning content and activities asynchronously by watching our instruction videos per week and connecting with your group members. The details of this process will be further discussed in the class week by week.

#### 13.9. Academic Conduct Policy

See the current Undergraduate Academic Catalog and the Student Handbook available from Student Affairs.

#### 14.1 Inclusion Statement

I recognize that I cannot fully understand the lived experience of many minoritized individuals. However, I am dedicated to increasing excellence through inclusion. That includes recognizing as assets the different perspectives students and scholars from diverse backgrounds bring to the classroom and to science. It includes a drive to have the readings and examples used in the classroom be as inclusive and diverse as possible. Furthermore, it is an awareness that biases, both conscious and unconscious, exist in academia, science, and the world, and an aim to reduce the influence of those biases in my decisions and in those around me. Actions that seek to limit the potential of others or perpetuate biases or anti-inclusive sentimentality will not be tolerated.

### 14.2 Safe Space

To the extent possible, I hope you will consider my office a safe, non-judgmental space; a place where you can bring your whole self and all your emotions. As stated above, I am obligated by law to report Title IX violations and any reports of abuse. Beyond that, I will do my best to listen, help, and direct you to campus and community resources when appropriate.

## 14.3 Syllabus Changes

This syllabus is a guide to the class and will be adhered to as much as possible; however, I reserve the right to make changes as I see fit, so long as they do not create an additional undue burden on the student.

#### 14.4 Miscellaneous

Congratulations on reading all the way to the end of the syllabus. For an extra credit point, please email a picture of your favorite dog breed to me.