

University of California, San Diego

**Understanding Factors Affecting Undergraduate Office Hours Attendance Rates  
in Higher Education**

Cognitive Science Honors Thesis

Hazel Leung

Committee:

Professor Federico Rossano

Professor Taylor Scott

Amy Fox

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## **ABSTRACT**

Office hours are scheduled times outside of standard class times when students can meet with instructional staff. Traditionally, office hour times are posted on a course syllabus, mentioned occasionally in class, and are a voluntary experience. This exploratory study set out to understand how frequently undergraduates at UC San Diego in the Cognitive Science Department are utilizing office hours, what undergraduates are using these sessions for, and what keeps students from attending office hours. Over Winter and Spring Quarter in 2019, I collected attendance numbers for 20 classes, surveyed 108 undergraduates about their attitudes and behaviors towards office hours, interviewed 9 undergraduate students about their experiences with office hours, and interviewed 8 instructors about their experiences with and approaches toward office hours. I found that, in general: undergraduate office hours attendance rates follow a spiking pattern that starts during the third week of the quarter and continue to ebb and flow throughout the rest of the quarter, students and instructors rank office hours usage, and 40% of students felt there was no need to attend office hours.

## **1. INTRODUCTION**

Office hours are a part of instructional team and student experiences at universities. Traditionally, office hours is a weekly one hour session during the week held by a member of the instructional staff of a given course. They are a resource for students who need extra help in the class, who may want to spend extra time reaching out to instructors, or who are seeking additional opportunities beyond the classroom. I was an Instructional Assistant (IA) in Spring Quarter 2018 for COGS 107C – Cognitive Neuroscience. As part of my duties, I held weekly one hour long office hours. 239 students were enrolled in the course. I held a total of 11 office hours (one every week of the quarter including finals week). Zero students showed up to office hours. Wondering if this was a common occurrence with different instructional team members, classes, and subject topics, I asked other people about their experiences. They, across instructors, Teaching Assistants (TAs), and other IAs, did not see many people at their office hours. So, a series of research questions were raised: Why do students go or not go to office hours? Who are the students who do/do not go? What do students expect from office hours, and how does this match with what instructors expect? This research project aims to unpack these questions utilizing a mixed-methods approach to investigate the office hours experience from both student and instructor perspectives.

## **2. BACKGROUND**

A lot of research has been done on higher education with the goal of understanding how to improve matriculation and graduation from higher education institutions. One component of higher education that has been extensively investigated is of student-faculty interactions. Studies have shown that student-faculty interaction in and out of office hours has a positive relationship with student performance (e.g. higher GPAs and graduation rates) (Anaya & Cole, 2001; DeAngelo, 2014; Gayles & Ampaw, 2014; Tovar, 2015), cognitive/personal development (e.g. critical thinking, writing skills, etc.) (Kim & Lundberg, 2016; Lundberg, 2014; Strauss & Terezini, 2007), affective outcomes (e.g. better student and instructor experiences) (Kim & Sax, 2014; Cole, 2007, Komaraju, Musulkin, & Bhattacharya, 2010). Other research has shown that informal student-faculty contact is an essential element of student socialization at a university, particularly in the case of commuter students (Iverson, et. al., 1984). However, the effects are not evenly distributed across different ethnicities (Cole, 2010; Terenzini, et. al., 2001; Strayhorn,

2010; Kezar & Moriarty, 2000), academic disciplines (Kim & Sax, 2011; Kim & Sax, 2014; Kim, Armstrong, & Edwards, 2015), and gender (Kim & Sax, 2015, November; Kezar & Moriarty, 2000).

Virtual office hours is a relatively new method of holding office hours and for instructors to interact with students. They are on the basis that web-based learning technology allows for broader reach and new opportunities for students that cannot be at a specific, physical location at a given time. However, moving the traditional, synchronous and co-located office hour methods online does not seem to have much effect on student attendance. Some research has found that students' usage of virtual office hours is not significantly different from physical office hours (Li & Pitts, 2009). So, it appears that virtual office hours in its current iteration are not capable of replacing or even reproducing traditional office hour experiences and benefits.

Research has also been done on online discussion boards, which are utilized as an asynchronous, distributed class resource. Other studies have examined the relationship between online discussion boards and success in college courses. Studies have correlated technology use in the classroom to higher overall performance (Krentler & Willis-Flurry, 2005), and that discussion boards positively impact both student's grades and student's overall opinion of the course (Al Jeraisy, Mohammad, & Alrashideh, 2015). Additionally, students who start and respond to discussions on boards tend to receive higher grades in class (Dalelio, 2013). Online discussion boards are a good way for students to engage with the class and perform better in the class. Yet, online discussion boards have similar benefits to traditional, in-person office hours, what is not clear is how this online resource affects students' behaviors towards and participation in voluntary, physical, and co-located office hours.

Given that there are many benefits in academic performance, college persistence, cognitive development, and positive affective outcomes, office hours are a powerful resource for undergraduate students. However, what remains to be understood is the rate at which students utilize this resource and what motivates students to attend, or not attend, office hours. This study aims to characterize and understand office hours attendance in the Cognitive Science Department at UC San Diego. This research has broader implications toward student experiences and student life at UC San Diego. Ultimately, it will provide a deeper understanding of the student body and could help suggest interventions that will improve student experiences on campus.

### **3. METHODS**

#### 3.1 Scope

This project and data collection is focused within the Cognitive Science Department at UC San Diego. Cognitive Science is an inherently interdisciplinary field. There are classes from several different domains: research methods, psychology, neuroscience, data science, artificial intelligence, design/human-computer-interaction (HCI), and cognition. As a result, the cognitive science department is a good starting point to study office hours from a diverse set of classes.

#### 3.2 Data Collection

This study utilized a mixed-methods approach; it synthesizes four different data collection methods. Each method contained overlapping questions and answers in order to maximize comparability between results.

##### *3.2.1. Instructor Weekly Report*

A Google Form was created to capture information about how many students were going to a specific office hours session, what students were discussing at office hours, and about how much of the session was used interacting with students. The form was sent to class instructional teams to fill out on a weekly basis during Winter and Spring Quarters of 2019. Participants (i.e. instructional staff of classes taught in a given quarter), were recruited via email.

In Winter Quarter, office hour attendance data was collected for eight classes. Below is a table of the classes and the subject domains they are in. In total, 195 office hours sessions were held and recorded throughout the 11 weeks of Winter Quarter 2019. Three courses were lower-division, and five courses were upper-division.

In Spring Quarter, office hour attendance data was collected for 12 classes. Below is a table of classes and the subject domains they are in. In total, 272 office hour sessions were held and recorded throughout the 10 weeks of Spring Quarter 2019. Three courses were lower-division and nine courses were upper-division.

##### *3.2.2. Student Expectation Survey*

A Qualtrics survey was created to understand students' general attitudes and knowledge of office hours and to capture students' past behavior regarding the office hours of a previously

taken social science class. A total of 109 undergraduate students were recruited via SONA, an online scheduling system. Participants were asked general questions about their attitudes and behaviors towards office hours and about their experiences with office hours regarding a specific social science class of their own selection. Students answered demographic questions at the end.

### *3.2.3. Student Expectation Interview*

Undergraduate students were interviewed in approximately 30 minute semi-structured interview sessions. A total of 9 undergraduate students were recruited via SONA, an online scheduling system. Students were asked about their general experiences with classes at UC San Diego, their studying habits, and their usage of class resources. Responses were audio recorded and interview notes were taken.

### *3.2.4. Instructor Expectation Interview*

Instructors were interviewed in approximately 40 minute semi-structured interview sessions. A total of 8 instructors were recruited via email and were interviewed. These interviews were intended to provide insight into what the instructor/TA/IA experiences have been and how they approach conducting their own office hours. Responses were written down in the form of interview notes.

## 3.3. Coding

Across the student expectation survey, interview, and instructor expectation interview data collection methods, participants were asked what they believed to be the general purpose of office hours was for. Participant responses for this question were coded in the following ways:

- a. To get clarification/help on course concepts (e.g. “To ask questions,” “To help students with any questions or concerns”).
- b. For students and instructors to connect with one another (e.g. “Build a relationship,” “one on one conversations,” “build network”)
- c. To have more in-depth conversations (e.g. “go more in-depth with material,” “to explore more about a subject”)
- d. For retroactive exam/homework review (e.g. “review midterms and tests,” “go over past homework or exams,” “checking exam answers”)

In the student expectation interviews, responses to the question about what class resources the participant utilizes were coded in the following way:

- a. Lecture Podcasts: The student reported listening to/re-watching podcasts.
- b. Online Resources: The student reported doing an online search and going to a webpage.
- c. Asking Friends: The student reported asking a friend or a classmate.
- d. Instructional Team: The student reported asking a professor or TA of the class.

In the student expectation survey, responses to the question about reporting on their student experience with professor/instructor office hours and TA office hours were coded in the following ways:

- a. N/A: The student reported never to have gone to office hours. (e.g. “Never went,” “N/A”, “I haven’t been to office hours”)
- b. Nervous: The student reported feeling nervous, anxious, or stressed.
- c. Good: The student reported feeling good, okay, happy, satisfied, or relieved.

## **4. RESULTS**

### 4.1 Instructor Weekly Report

A total of 483 office hours sessions were recorded in both Winter and Spring Quarters of data collection. 195 sessions were from Winter Quarter, and 288 sessions were from Spring Quarter. 258 sessions were attended by at least 1 student (53.4%). See Appendix **Table 4** and **Table 5** for total attendance breakdown into individual classes in Winter Quarter 2019 and Spring Quarter 2019, respectively.

**Table 1:** In Classes with More than 100 Students Enrolled: Number of Enrolled Students and of Students who Attended Office Hours by Class

<b>Class</b>	<b>Quarter</b>	<b>Number of Students Enrolled</b>	<b>Number of Students who Attended Office Hours</b>
COGS 13	Winter 2019	300	58
	Spring 2019	297	51
COGS 14A	Winter 2019	175	20
COGS 14B	Spring 2019	202	63
COGS 101A	Winter 2019	421	90
	Spring 2019	219	85
COGS 101B	Spring 2019	336	57
COGS 107B	Winter 2019	444	22
COGS 107C	Spring 2019	233	26
COGS 102B	Winter 2019	200	45
COGS 102C	Spring 2019	151	1
COGS 120	Winter 2019	141	109
COGS 121	Spring 2019	144	37
COGS 9	Winter 2019	326	32
COGS 18	Spring 2019	276	209
COGS 108	Spring 2019	775	418

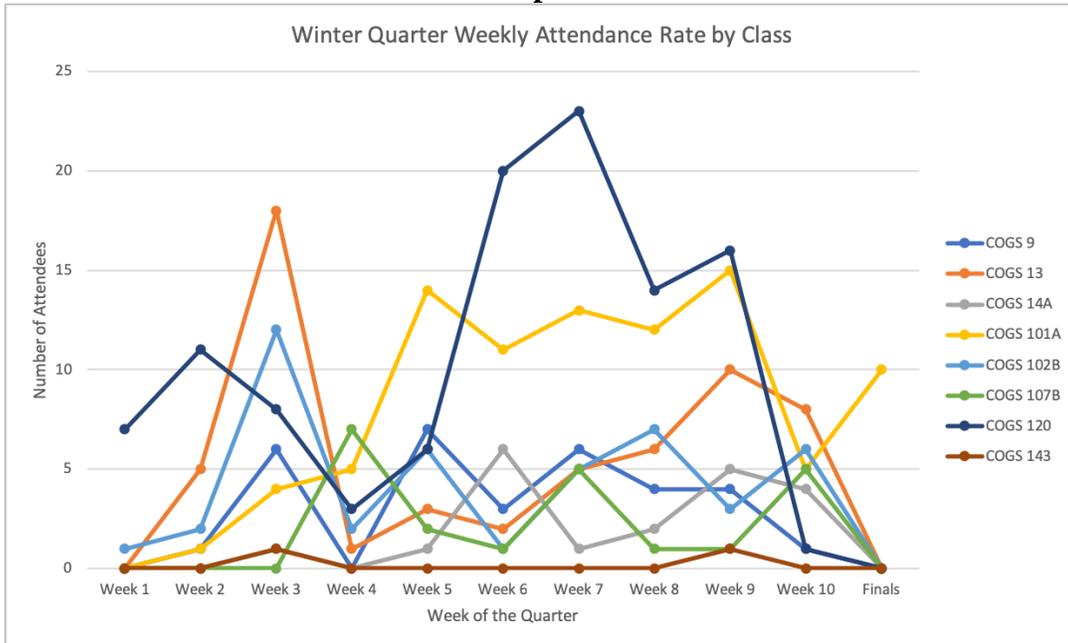
**Table 1.** Information about how many students were enrolled and how many students were reported to go to office hours for a given class in classes with more than 100 students enrolled during a particular quarter. 16 Classes had more than 100 students enrolled.

**Table 2:** In Classes with Fewer than 50 Students Enrolled: Number of Enrolled Students and of Students Who Attended Office Hours by Class

<b>Class</b>	<b>Quarter</b>	<b>Number of Students Enrolled</b>	<b>Number of Students who Attended Office Hours</b>
COGS 143	Winter 2019	40	2
COGS 152	Spring 2019	37	0
COGS 155	Spring 2019	47	1
COGS 160 (C00)	Spring 2019	32	7

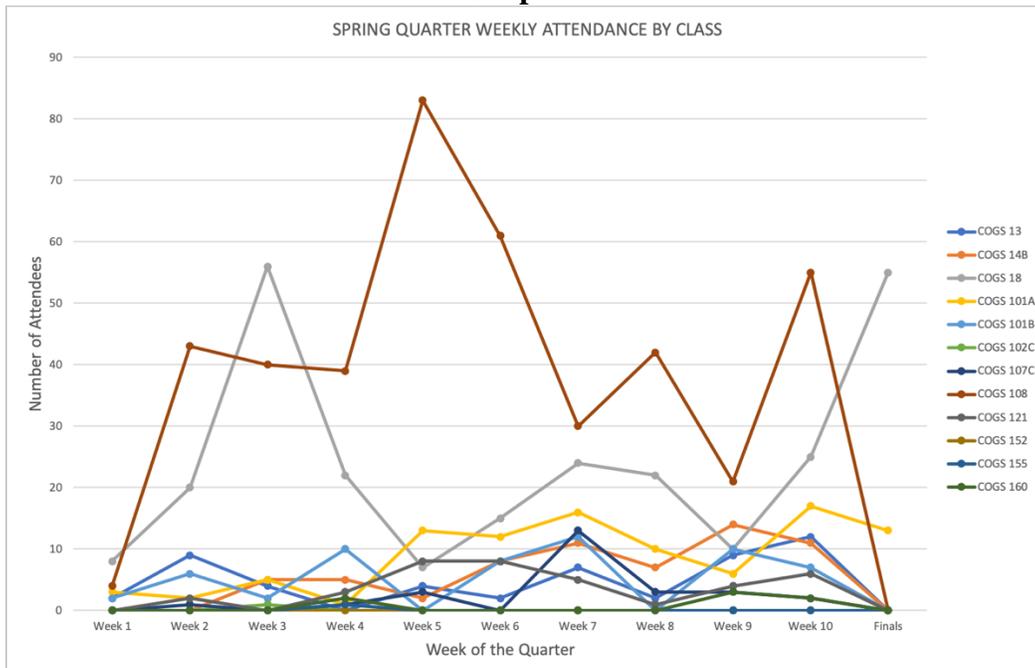
**Table 2 .** Comparison between the number of enrolled students and number of students who attended office hours in a given class with less than 50 students enrolled during a particular quarter. 4 classes had fewer than 50 people enrolled.

**Graph 1:**



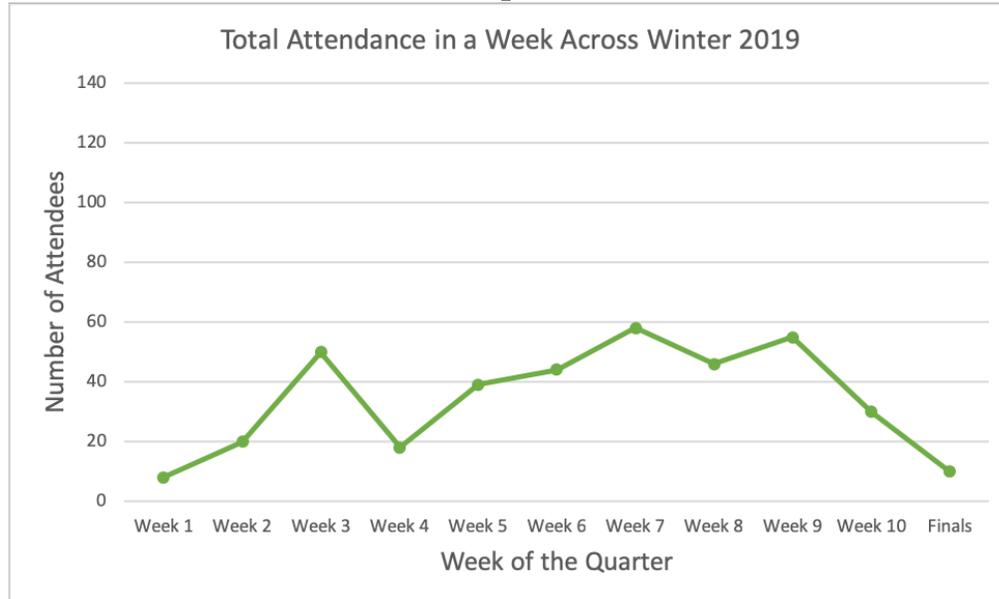
**Graph 1.** Weekly attendance rate for 8 classes through Winter Quarter 2019. Most classes see a spike in attendance rate starting Week 3, then a decrease during Week 4, and then an increase again during the middle of the quarter. COGS 120 had the highest attendance rate during week 7 with 23 student attendees.

**Graph 2:**



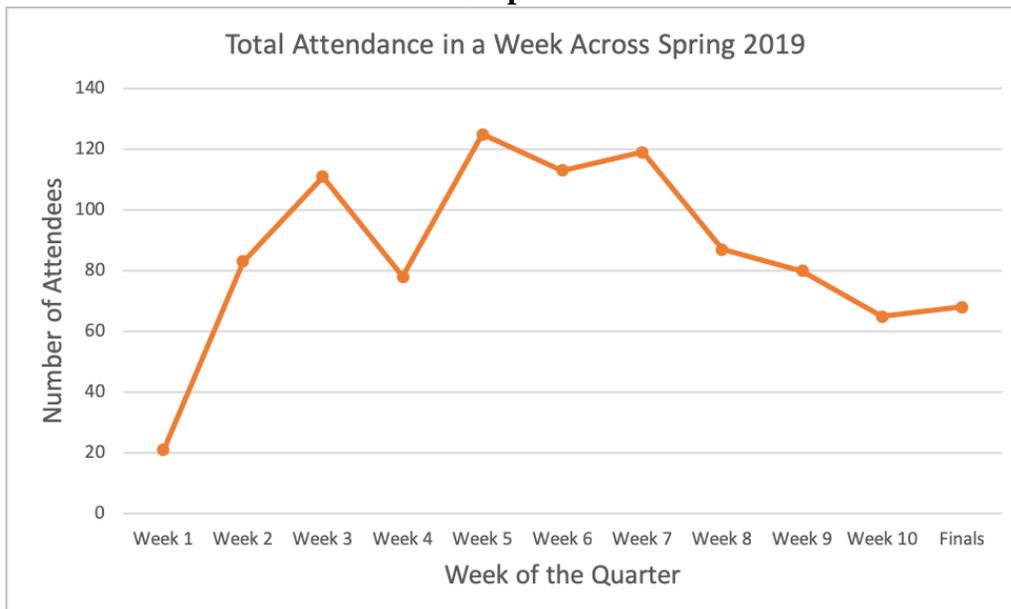
**Graph 2.** Weekly attendance rate for 12 classes through Spring Quarter 2019. COGS 18 and 108 saw much higher attendance rate than any other class the entire quarter long. (For a more detailed graph with a scale from 0-25 attendees, go to the Appendix, **Graph 2.5**)

**Graph 3:**



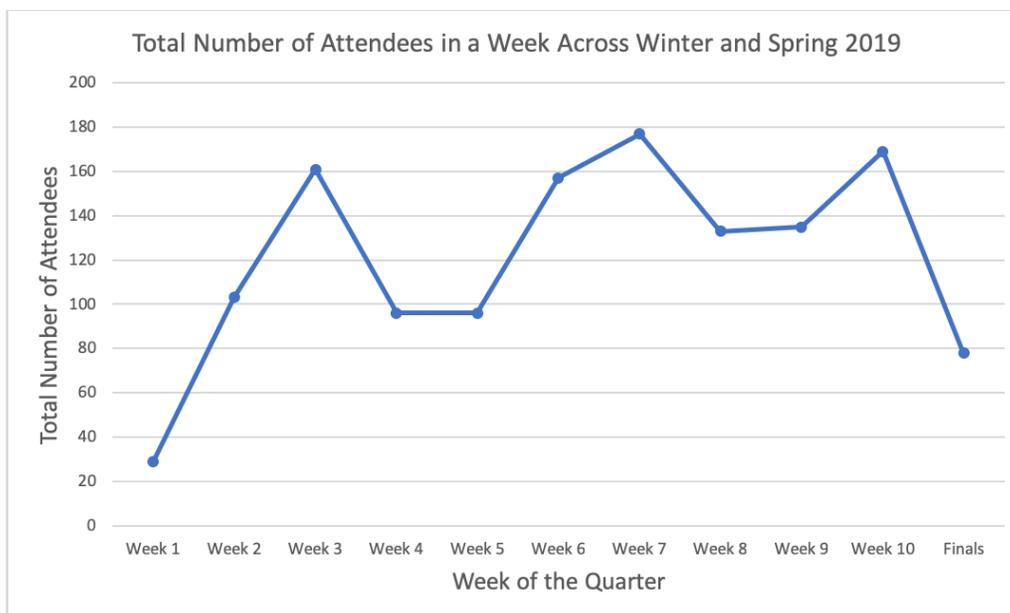
**Graph 3.** Total weekly office hours attendance during Winter 2019. There is a spike in attendance during Week 3, a decrease during Week 4, and then an increase again (where total attendance remained between 40-60 students per week until Week 10).

**Graph 4:**



**Graph 4.** Total weekly office hours attendance during Spring Quarter 2019. There is a sharp spike in attendance during Week 3, a 33 student decrease during Week 4, and then an increase of 47 students during Week 5. Note: Finals Week attendance data only reflects four classes, as data was collected before Finals Week was completely over.

**Graph 5:**



**Graph 5.** Summed total weekly attendance for both Winter and Spring Quarters. Attendance saw a large increase during Week 3 (161 students attended), a decrease during Week 4 and 5 (96 students both weeks), and an increase again after Week 6, with a peak of 177 students during Week 7. Finals Week attendance data only reflects four classes from Spring Quarter 2019, as data collection ended before Finals Week was completely over.

#### *4.1.1 Office Hours Discussion Topics*

The weekly form also collected information on what kind of topics were discussed during the office hours session. 271 sessions were used to get clarification/help on course concepts (85.2%); 65 sessions were used for students and instructors to connect with one another (20.4%); 39 sessions were used to have more in-depth conversations (12.3%); 38 sessions were used to get retroactive exam/homework review (11.9%).

## 4.2 Student Expectation Survey

### *4.2.1 General Purpose of Office Hours*

Participants were asked “In general, what do you think is the purpose of office hours?” and were asked to provide a short answer free response. Of the 109 responses: 99 students reported that office hours was for to get clarification/help on course concepts (90.8%); 36

students reported they were for students and instructors to connect with each other (33.0%); 11 reported they were for to have more in-depth conversations (10.1%); 8 reported they were to get retroactive exam/homework review (7.3%).

#### *4.2.2 Professors' Office Hours Experience Mood Mapping*

Participants were asked to “Think back to a time when you went to the professor’s/instructor’s office hours. How did it make you feel before going? During the session? After the session?” 45 students reported a full experience (i.e. their state of mind/mood/emotion before, during, and after the office hours session). Of those sessions, 30 students reported feeling nervous before the session, 3 reported feeling nervous during the session, and zero students reported feeling nervous after the session. In contrast, 5 students reported feel good before the session, 20 reported feeling good during the session, and 31 students reported feeling good after the session.

#### *4.2.3 Teaching Assistants' Office Hours Experience Mood Mapping*

Participants were asked to “Think back to a time when you went to the TA’s office hours. How did it make you feel before going? During the session? After the session?” 14 students reported a full experience. Of those 14 sessions, 4 students reported feeling nervous before, and zero students reported feeling nervous during and after the session. 10 students reported feeling good before the session, 17 students felt good during the session, and 18 students felt good after the session.

### 4.3 Student Expectation Interview

#### *4.3.1 Use of Available Class Resources*

Participants were asked to “Walk me through your process of figuring out a problem or when you didn’t understand a course concept. How did you figure it out? Do you feel like this is an effective way? Looking back, what do you think would have helped or been better in these scenarios?” Of the 9 student participants, 5 students report using lecture podcasts; 5 students mention checking online resources (e.g. Google, Wikipedia, video tutorials, etc.); 3 students

mention asking friends/classmates for help; two students reported asking a member of the instructional team for help.

#### *4.3.2 Varying Office Hour Experiences*

Participants were asked to “Walk me through a time when office hours was unproductive or you felt like you did not get what you wanted out of it.” Three of the nine students reported feeling like the instructor or TA holding the office hour did not actually have an answer to their question. Two students noted that they did not “want to appear dumb” when going to office hours, and another student noted that they often did not go to office hours even though they probably should have because they “were too far behind” to attend.

### 4.4 Instructor Expectation Interview

#### *4.4.1 General Purpose of Office Hours*

Instructor participants were also asked the same question as student participants regarding what they thought were the general purpose of office hours. Of the 8 participants interviewed, 7 reported office hours are for students to get clarification/help on course concepts (87.5%); 3 reported they were for students and instructors to connect with each other (37.5%); 2 reported they were for to have more in-depth conversations (25.0%); 1 reported they were to get retroactive exam/homework review (12.5%).

#### *4.4.2 Office Hours Scheduling Considerations*

Participants were asked “How do you decide when to schedule your office hours?” 7/8 responses (87.5%) mentioned specifically trying to find a time that is convenient for most students and to maximize attendance. Example responses included: “I’ve found the best time is the late morning/early afternoon because students tend to be around then,” “schedule it so that class assignments are due later [in the week] so they can get help,” “right after class so students are around, don’t need to worry about coming to campus, and the material is fresh in their minds.”

## 5. DISCUSSION

### 5.1. Spiking Pattern in Attendance

In both Winter and Spring Quarters, office hours attendances saw rises and falls in attendance rates throughout the quarter. This “spiking” pattern could possibly correlate to when big exams, assignments, and projects are due and to the week after an exam is taken. For example in COGS 9 during Winter 2019 (Appendix, **Graph 6**), there were spikes in attendance during Week 3 and Week 5 of the quarter. These weeks coincided with the first assignment being due (Week 3) and the midterm exam (Week 5) (. During Week 4, it was reported that it was pouring rain, perhaps affecting how many students who wanted to get to a specific location for office hours. For COGS 101A in Winter Quarter (Appendix, **Graph 7**), these spikes in attendance coincided with the week after an exam. For COGS 101A in the Spring Quarter (Appendix, **Graph 8**), these spikes coincided with both exam week and the week after the exam. As such, there does not appear to be a uniform behavior pattern in attendance; it depends on the class, the methods of evaluation, and when theses occur during the quarter for that specific class.

However, these spiking patterns can be seen in individual classes, in the summation of attendance for an entire quarter, and in the total attendance for both Winter and Spring Quarters. This can indicate that there are specific weeks in the quarter (typically starting Week 3) when students need more individualized, educational support.

### 5.2 Similar Office Hours Usage Rankings between Students and Instructors

The Student Expectation Survey and Instructor Expectation Interview, participants were asked what they thought was the general purpose for office hours. Student and Instructor responses produced exactly the same rankings for usage. This indicates that both students and instructors are on the same page, and that there is little to no miscommunication as to what kinds of discussions can occur in office hours. At the same time, the ranking of purposes is also reflected in real life. Students mostly tend to go to office hours when they need help with the course they are enrolled in, whether it be to get clarification on a concept they did not fully understand when it was presented in lecture or to get help on homework assignments. Student use it second most for connecting with the instructor, getting to know the instructor’s research field (if they do research), chat about miscellaneous things, or to get advice on what to do next

after college. As such, it does not appear that there is a need for calibration on what is expected to come from office hours for between students and instructors.

**Table 3:** Percentages of Responses in each Discussion Topic in Student Expectations, Instructor Expectations, and Reported Usage

Purpose	Student Expectations	Instructor Expectations	Reported Usage
Clarification/help with course concepts	90.8%	87.5%	85.2%
Connecting with each other	33.0%	37.5%	20.4%
Have more in-depth conversations	10.1%	25.0%	12.3%
Retroactive exam/homework review	7.3%	12.5%	11.9%

**Table 3.** Comparison of Student expectations, instructor expectations, and actual reported usage of office hours. Student and Instructor have the same expectations as to what office hours should be used for. The same raking is reflected in real life as well.

### 5.3 Overall Office Hours Attendance Rate is Low

Of the 4,893 students enrolled in the 20 classes across Winter and Spring Quarters, only 1,333 students attended office hours (27.2%). This does not account for any possibility for repeat students who go more than once in a quarter. As such, the majority of students in these classes do not have an individualized one-on-one interaction with a member of the class’s instructional team; most students cannot gain much of the positive benefits that come from informal student-faculty interactions. While there are students who might get quality student-instructor through other means (e.g. working in a research lab under a faculty member, acting as an instructional assistant/tutor for a course, through positions in clubs and campus organizations, etc.), these positions and interactions are comparatively limited to fewer students than office hours. Office hours, by design, are indented for any student in the class, and anyone is free to attend any session they can and/or want. This has implications to make office hours more of a student experience and more accessible – particularly when students need more support (i.e. during the spikes in attendance when big assignments/exams/projects/etc. are due).

#### *5.4. Lowering the Barrier to Entry*

There are a couple of possible avenues for increasing office hours attendance rates: providing more flexible times and providing students with a experiential reference of what office hours are like and how they can benefit from attending. These methods, and any other methods, are not mutually exclusive and can be done in any series of combinations. For example, implementing policies like requiring attendance to at least one office hour session in the quarter (perhaps can be at a time that coincides with a big due date) or explicitly saying what office hours can be used for at the beginning of the quarter and continuously mentioning it throughout the quarter can make office hours less daunting and foreign. Requiring attendance to an office hours based on an important assignment/project/exam can help students experience office hours that they might not normally have elected to do so, and it can provide an opportunity for students to ask for help if they need to without feeling like they are wasting the instructional staff's time or like they should not be there. Setting expectations early on and consistently mentioning them can help make office hours a more prominent resource for students.

### **6. FUTURE DIRECTION**

Due to the exploratory nature of this project, there are many possible opportunities for future research projects. In order to truly understand what factors have the biggest effect on undergraduate office hours attendance, correlational, statistical work should be done. As a result of gaps in the data, classes could not be entirely compared. For example, only instructor office hour data was collected for COGS 14A, missing the sessions that other members of the instructional staff held throughout the quarter. A more targeted study design and analysis can be done to pinpoint which factors play the biggest role in determining whether or not a student will go to office hours. Additionally, this project was only conducted in one department at UC San Diego, making it a very limited snapshot into what the undergraduate experience is with office hours. More research should be done in different departments and even in different universities in order to really understand this student experience. Lastly, as a result of this project, and any other subsequent research projects, designing and studying interventions that might improve office hours should be done.

## 7. ACKNOWLEDGEMENTS

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## APPENDIX

**Table 4:** Number of Office Hours Sessions Recorded During Winter Quarter

Subject Domain	Course Title	Class Code	Number of Sessions Recorded
Research Methods	Field Methods: Studying Cognition in the Wild	COGS 13	35
	Introduction to Research Methods	COGS 14A	10
Psychology	Sensation and Perception	COGS 101A	50
Neuroscience	Systems Neuroscience	COGS 107B	27
Design/HCI	Cognitive Ethnography	COGS 102B	24
	Interaction Design	COGS 120	19
Data Science	Introduction to Data Science	COGS 9	20
Cognition	Animal Cognition	COGS 143	10

**Table 4.** A total of 195 sessions were recorded. 45 sessions were from the research methods domain, 50 were from the psychology domain, 27 were from the neuroscience domain, 43 were from the design/HCI domain, 20 were from the data science domain, and 10 were from the cognition domain.

**Table 5:** Number of Office Hours Sessions Recorded During Spring Quarter

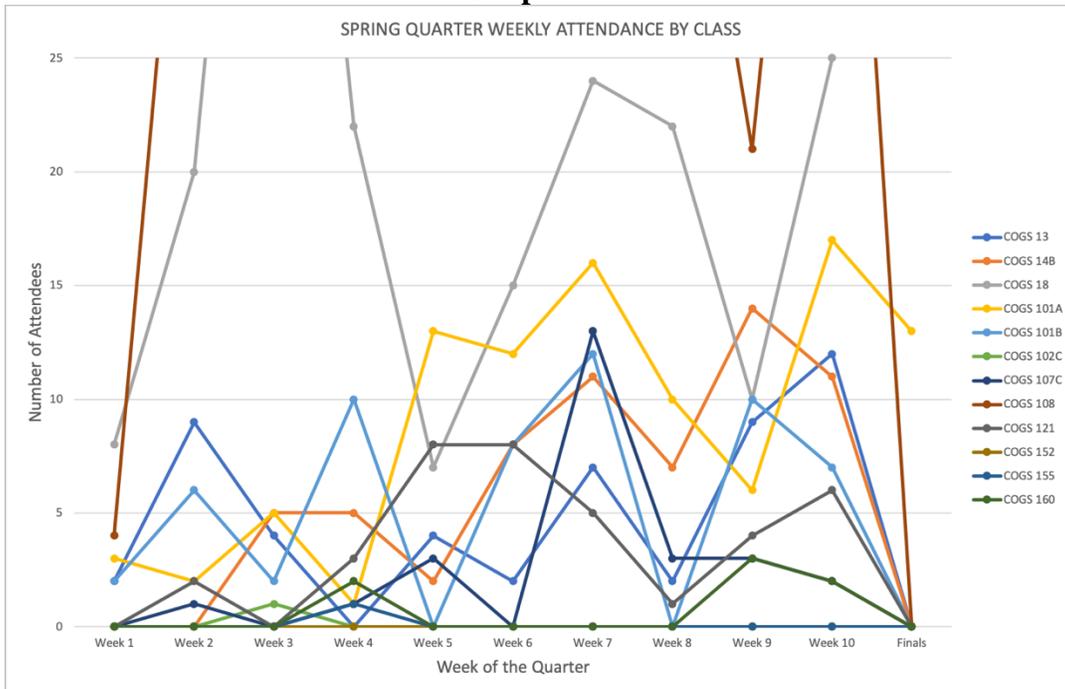
<b>Subject Domain</b>	<b>Course Title</b>	<b>Class Code</b>	<b>Number of Sessions Recorded</b>
Research Methods	Field Methods: Studying Cognition in the Wild	COGS 13	28
	Introduction to Statistical Analysis	COGS 14B	31
Psychology	Sensation and Perception*	COGS 101A	55
	Learning, Memory, and Attention	COGS 101B	28
Neuroscience	Cognitive Neuroscience	COGS 107C	33
Design/HCI	Cognitive Design Studio	COGS 102C	8
	Human Computer Interaction Programming Studio	COGS 121	18
Data Science	Introduction to Python	COGS 18	24
	Data Science in Practice*	COGS 108	44
Cognition	Cognitive Foundations of Mathematics	COGS 152	5
	Gesture and Cognition	COGS 155	4
	Animal Communication	COGS 160 (Section C00)	10

\* Instructor had two office hour sessions in a week, doubling the instructor's number of office hours contribution to this course.

† Two sets of lectures with the same instructor were held of this class, doubling the instructor's number of office hours contribution to this course.

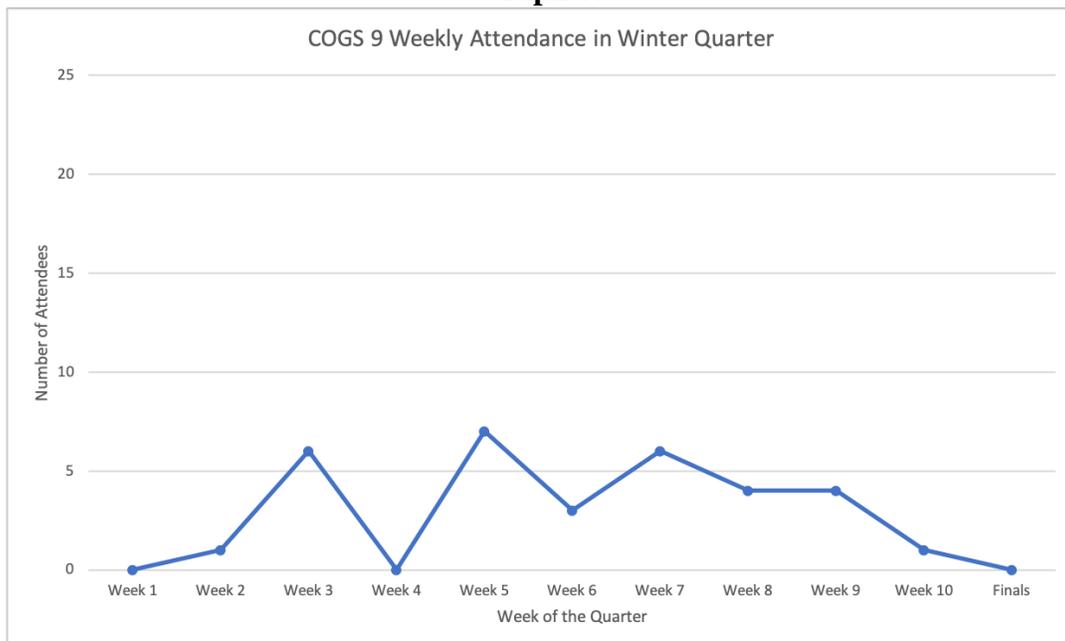
**Table 5.** A total of 288 office hours sessions were recorded during Spring Quarter. 59 were from the research methods domain, 83 were from the psychology domain, 33 were from the psychology domain, 26 were from the design/HCI domain, 68 were from the data science domain, and 19 were from the cognition domain.

**Graph 2.5:**



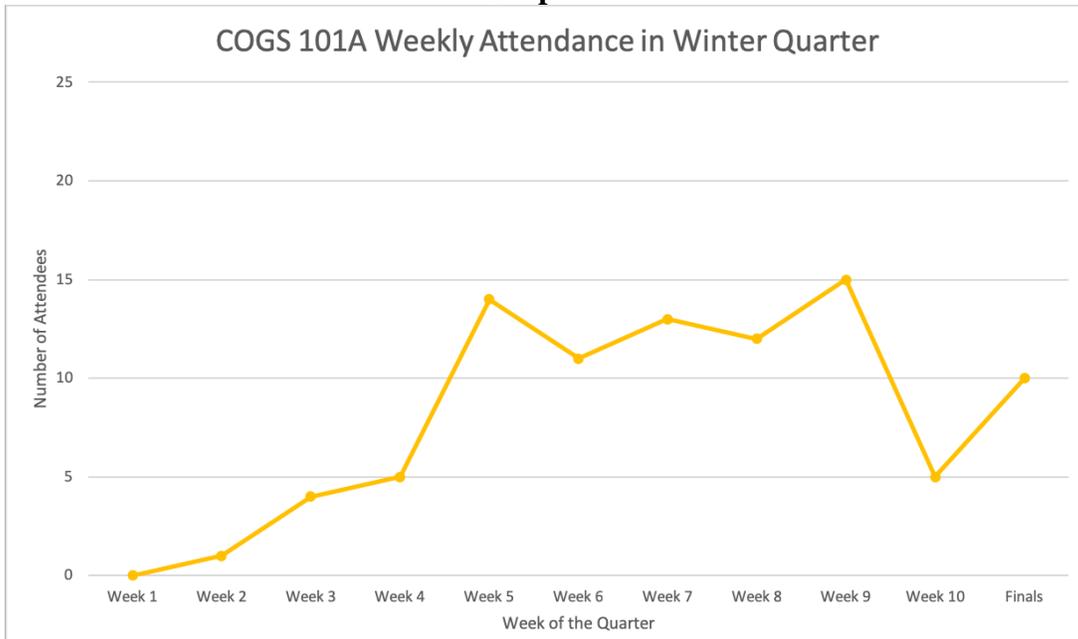
**Graph 2.5.** A scaled attendance rate representation of **Graph 2** for enlarged detail on classes without as many attendees as COGS 18 and 108. Sharp increase and decrease patterns are visible in many of the classes, with three classes (COGS 152, 155, and 160) seeing close to zero students in a week.

**Graph 6:**



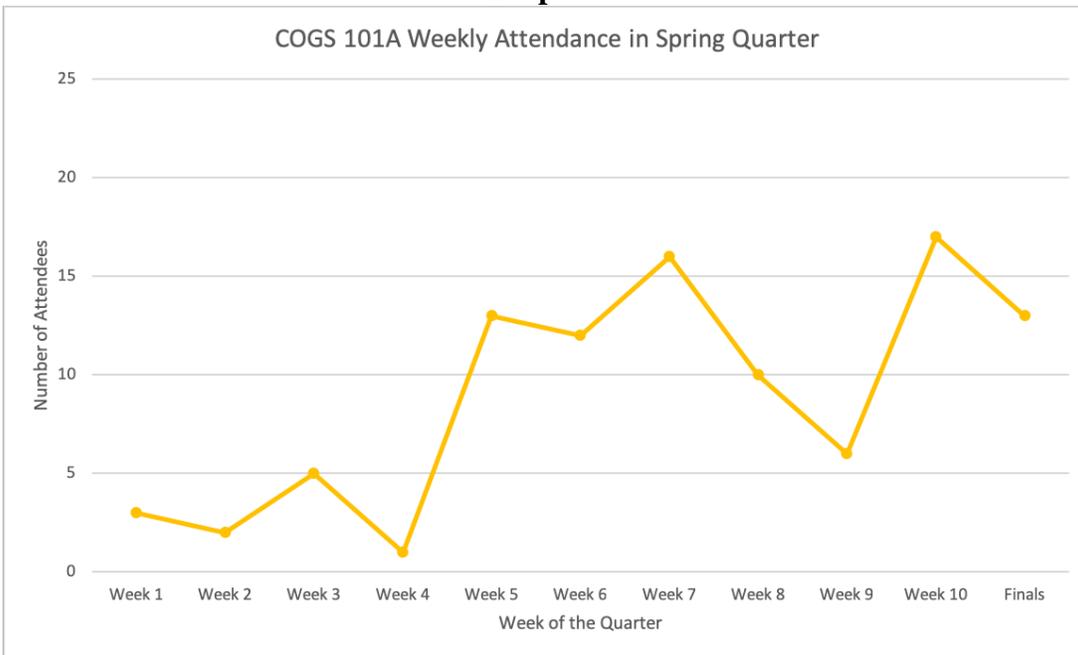
**Graph 6:** An individual weekly attendance rate for COGS 9 – Intro to Data Science course during Winter Quarter 2019. The first assignment was due during Week 3. It was reported to be pouring rain during Week 4. The midterm exam was during Week 5.

**Graph 7:**



**Graph 7:** An individual class weekly attendance rate for COGS 101A – Sensation and Perception course during Winter Quarter 2019. The first midterm exam was during Week 4 and the second midterm exam was during Week 8. Both instances saw an increase in attendance the week after the midterm (i.e. Week 5 and Week 9).

**Graph 8:**



**Graph 8:** An individual class weekly attendance rate for COGS 101A – Sensation and Perception course during Spring Quarter 2019. The first midterm was Week 4, and there is a sharp rise in attendance during Week 5. The second midterm was Week 7. The Final was during Finals week. These two subsequent exam weeks saw rises in attendance.