UCF | Faculty Senate

Faculty Senate Personnel Committee

Agenda for meeting of Wednesday, March 10, 2021, 11:30 am via ZOOM

1. Call to Order
2. Roll Call
3. Approval of Minutes of February 03, 2020 meeting
4. Recognition of Guests
5. Announcements

    -Resolution 2020-2021-9 Eligibility Requirements for the Teaching Incentive Program
    Status update

6. Old Business

    - Committee topics to send to ad-hoc Equity, Inclusion and Diversity committee

7. New Business

    - Salary reports on Equity and Compression

        Discussion: Andre Watts, Interim Director, Institutional Analytics

        Handouts: Faculty Salary Equity Study 2020

        Faculty Salary Equity Study 2020 -Compression

8. Other Business
9. Adjournment

UCF | Faculty Senate

Personnel Committee

Minutes for meeting of February 3, 2021, 11:30 a.m.

Zoom Meeting

Attendees: Stephen King, Mason Cash, Martine Vanryckeghem, Jana Jasinski, Edwin Torres, Yoon Choi, Blake Scott, Timothy Hawthorne, Mark Ehrhart, Lucretia Cooney, Jascinth Lindo, Karol Lucken, Michael Proctor.

Minutes approved.
No guests, no new business, no remarks.

Steering Topic # 2020-2021-21 Extension of Tenure Clocks Under COVID

- Taskforce (Stephen King, Blake Scott, Timothy Hawthorne) created the document: Faculty Usage of COVID-19 Impact Statements for review.
- The taskforce reviewed the Purdue, Texas, Michigan, North Carolina State University. Based the report on their findings. They found only one university offered a 2nd year extension.
- Other universities throughout the country have created COVID-19 Impact Statements.
- This statement could be used for promotion, annual evaluation, CPE, and tenure.
- Change the title to: Optional Statement of COVID-19 Repercussions.
- Can Personnel Committee worked directly with the Provost Office (Faculty Excellence)?
- Are there any unintended issues to using this document when it comes to promotion/tenure?
- (Timothy Hawthorne – Chat) "I agree with Jana's point that we need to think about messaging to departments and committees about how to use these statements for review. This came up in an early January conversation our Interim Dean and I led in COS with pre-tenure folks too."
- Faculty Excellence could use the Building my dossier workshops as one way to get the word out about this statement.
- Faculty Excellence may go through the document and add/edit/delete based on unintended consequences. This document is an example.

Amended in committee to address certain points raised by members. Approved.
Steering Topic # 2018-2019-2 Payment Structure for Awards.

- Eligibility Requirements for the Teaching Incentive Program brought forward by Yoon Choi
- Fundamental perspective of equal opportunity. Every eligible faculty should have access to this opportunity. The selection committee should understand the difference between the large classroom and small classes.
- It started about 20 years ago to entice teaching large classes. It was across the University system. We are the only university that has kept the criteria.
- This needs to be bargained. Changing the eligibility criteria could be doable outside of the contract.
- Amended the resolution to say: we are not getting rid of the productivity; recommend that it's a baseline that a faculty member that taught x semesters during the period in question.
- Proposed an amendment:

Motion carries 8 to 3. Move to Steering.

Homework: please review the Faculty Senate website and the outstanding topics that have been assigned to Personnel. Which ones do you feel should be moved to the ad-hoc Equity, Inclusion and Diversity committee.

UNIVERSITY OF CENTRAL FLORIDA

UCF FACULTY SALARY COMPRESSION AND INVERSION STUDY

Summary of the UCF Working Group's Findings and Recommendations

FEBRUARY 2021

REPORT PREPARED BY FACULTY SALARY EQUITY STUDY WORKING GROUP
Members include representatives from Faculty Excellence, Faculty Senate, Human Resources, Office of Institutional Equity, Institutional Knowledge Management, and Institutional Analytics

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UCF 2020 FACULTY SALARY COMPRESSION AND INVERSION STUDY

EXECUTIVE SUMMARY

BACKGROUND

In 2016, the faculty senate at the University of Central Florida commissioned the office of Institutional Knowledge Management to research gender and ethnicity salary inequities among the faculty ranks at the university. A diverse team consisting of faculty, researchers, and human resource representatives collaborated over seven months to study and present findings on the charge and issue.

While the 2016 study did supply key insights into faculty salary disparities at the university, it did not address potential salary compression and inversion issues within faculty ranks at UCF. In 2020, the faculty senate proposed and accepted resolution *2019-2020-15* (Appendix E), which called for a five-year periodic analysis of faculty salary to cover the areas of tenure and non-tenure salary equity (e.g. gender/race/ethnicity) along with studying potential salary compression and inversion inequities.

The data, analyses, conclusions, and recommendations presented in this study, directly addresses the compression and inversion requirements of the faculty senate resolution for the 2020 period.

There have been many studies performed on salary compression dynamics and its impact on wage distribution in higher education. Salary compression is typically defined as when there exists a narrowing of salaries between staff in senior or higher positions, than those who are in lower-level positions. Inversion, an extreme version of compression, is when the salaries of those in the lower positions exceed those in higher or more senior positions. For the purposes of this study, indications of compression are defined as the situation where the salary difference between higher ranked faculty and lower ranked faculty is ≤ 9%). Inversion is defined in this study as when the salary of a higher ranked faculty is less than salary of a lower ranked faculty member (by any measure). Another important aspect of compression and inversion is its correlation to market forces and if its existence in one organization is also present in others of the same industry. While this type of analysis is prevalent in non-academic industries, it is not as frequently (Balmoral, 2012) performed in higher education. This study aims to address the market force impact similar to previous studies with additional context for evaluation.

The following analysis in this study used descriptive and rank ratio analyses on 2019-20 faculty salary data to identify the existence of salary compression and inversion at the 2-digit Classification of Instructional Programs[1] (CIP) level for CIP codes at UCF and among the faculty ranks of Professor, Associate Professor, Assistant Professor, and Instructor/Lecturer. To assess whether compression and inversion was due to market forces at the same ranks, a comparison

[1] A six-digit code in the form xx.xxxx that identifies instructional program specialties within educational institutions. The Classification of Instructional Programs (CIP) provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity.

of these ratios with those from 69 institutional peers who shared the same characteristics[2] as UCF (Public, Very High Research) was performed using faculty salary data from the College and University Professional Association[3] (CUPA-HR) for the 2019 academic year.

In addition, other descriptive analyses of additional faculty wage data were performed to further understand faculty and rank wage dynamics at UCF.

Please note that while UCF 2020-21 salary data was available at the time of this analysis, CUPA-HR data for the same time period was not. Therefore, this analysis was performed on UCF and CUPA-HR salary data for the 2019-20 period.

FINDINGS

- **In 2019, there was no evidence of widespread salary compression nor inversion** among UCF faculty overall, at the university level.
- **In 2019, there was evidence of salary compression to investigate** among faculty ranks at CIP 50 (Visual and Performing Arts) and CIP 44, (Public Administration).
- CIP 11 (Computer and Information Sciences) and CIP 43 (Homeland Security), while not showing evidence of compression, are at the threshold and warrant monitoring Conversely, CUPA peers showed salary compression at CIP discipline: 52 - Business, Management, Marketing, and Related Support Services, 16 - Foreign Languages, Litereatures, 38 - Philosopy and Religious Studies, and 45 - Social Sciences.
- Median salaries of UCF faculty in any rank are lower than those of their peers at CUPA institutions, and a clear variation within CIP.

CONCLUSIONS AND RECOMMENDATIONS

While the Committee found little severe evidence of compression as defined by the resolution, what was found may even more serious and that is growing wage gaps within the University.

For example:

Please note that only faculty who were with UCF in both 2014 and 2019 are included here

- **UCF Professor average salaries increased 16.7% while CUPA-peer Professor salaries increased only 11.2%.**
- **Professor wage growth contrasts first with UCF Associate Professor where** 90 UCF Associate Professors who (29.4%) did not keep pace with CUPA-peer Associate Professors average salary increases. At the same time, the median salary of UCF Associate Professors is 8.81% less than the median salary of CUPA-peer Associate Professors.

[2] Based on the Carnegie Classifications framework set by Indiana University's Center for Postsecondary in Research, which identifies groups of comparable institutions.
[3] CUPA peer institutions were comprised of public, very high research institutions, and include salaries of faculty who are classified in non-administrative or coordinator roles.

- **Additionally UCF Assistant Professor average salaries wage growth of 9.2% fell behind** CUPA peers Assistant Professors whose salaries increased 17.0%. UCF Assistant Professors average salary is 6.46% less than the average salary of CUPA-peer Assistant Professors. 32 UCF Assistant Professors (53.3%) did not keep pace with CUPA-peer average salary increases. The median salary of UCF Assistant Professors is 12.06% less than the median salary of CUPA-peer Assistant Professors.
- **The growing wage gap is further amplified by the fact that 199 or 22.7% of the UCF Professor, Associate Professor, Assistant Professor, and Instructor/Lecturer average salaries did NOT keep pace with to Employment Cost Index for Education (2014-2019) salary increase of +12.5%.**

This underscores the need for a comprehensive review of UCF's wage compensation and incentive policies.

SAMPLE DATA AND METHODOLOGY

Sample Data	Non-Administrative, Tenured/Tenure-earning, and Non-Tenured faculty employed full-time as of November 15 2019 **(n = 1,488)**. Excluded faculty roles include: Administrative faculty whose admin codes include Academic Administrator; Deans (including Assistant and Associate Deans); Vice Presidents (including Assistant and Associate VPs and VPs of Research); President; Provost; and Vice Provost; Chair or Director (including Assistant Chairpersons/Directors, Associate Chairpersons/Directors, Program Directors) - Coordinators remained in the study. Public, 4-year degree granting, and very high research peer institution salary data obtained from the College and University Professional Association (CUPA-HR) for the 2019-20 academic year for the purposes of comparisons to UCF.
Methodology	This study includes descriptive and rank-ratio analyses of 2019 salary data to identify the occurrence of compression and inversion along with understanding specific wage characteristics of faculty at identified ranks.

UNIVERSITY OF CENTRAL FLORIDA 2020 FACULTY SALARY COMPRESSION AND INVERSION STUDY

BACKGROUND

The following study reviews results from an exploration into the phenomena of faculty salary and compression at the University of Central Florida. Studies conducted at Florida Gulf Coast University (2012), California State University (2020), and others are guiding this research, with modifications made to reflect the UCF community and available data. All data for the studies presented in this report are based on salaries and faculty roles for the 2019-20 academic year. This study consists of a single year "snapshot" of faculty salary data by rank, college, and discipline (CIP).

As noted in the executive summary, a common definition of salary compression is where there exists a narrowing of salaries between staff in senior or higher positions than those who are in lower-level positions. Inversion, an extreme version of compression, is when the salaries of those in the lower positions exceed those in higher or more senior positions. For the purposes of this study, and as noted in the executive summary, indications of compression are defined here as where the salary difference between higher ranked faculty and lower ranked faculty ≤ 9%). In the case of extreme compression, inversion, the salary of the higher ranked faculty is less than salary of a lower ranked faculty member.

Methods to identify compression and inversion in higher education have traditionally been done by comparing the salaries at faculty ranks using different methods of compression ratio analysis. One such method involves comparing faculty at the individual disciplines and ranks to new incoming faculty (Macdonald, 2017). However, this method does not consider the ratios between the ranks, which would include returning faculty. Similarly, a different type of compression ratio analysis compares each faculty rank to its next lowest rank and gives a better picture of compression; however, the highest rank serves as the baseline, so understanding the impact of the highest rank salary is lost. The last method, rank ratio, overcomes the deficiencies of the previous two by comparing the average salaries between ranks and within discipline (Balmoral, 2012). Since the ratios of each rank share the same denominator (total average salary for each respective location), they are easily compared to each other to check for compression and inversion.

While these methods show the existence of compression, they cannot explain why compression and inversion occurred if the results from the ratio analyses would warrant further analysis. In cases where compression occurs, advanced statistical methods such as regression have been

used (Toutkoushian, 1998, Twigg, 2002) to analyze the significance of compression and its contributing factors. Typically, these advanced techniques would look further into new and returning faculty both with the faculty ranks and with CIP disciplines.

Another area of interest concerning salary compression is the impact of external market factors from direct competitors and industry. While this study is not attempting to do a full market survey on salary levels, it does attempt to address potential market impacts to any compression and inversion that would be present at UCF. The College and University Professional Association for Human Resources (CUPA-HR) collects data from many colleges and universities across the United States. This study performed a comparative wage distribution and compression analysis among faculty ranks between UCF and a set of institutional peers from the CUPA-HR data to see how UCF compares to market competition. If the existence of compression and inversion does exist at UCF and within the same discipline as the CUPA-HR peer, this would be an indication that external market forces are at play for the compression at UCF.

Please note that while UCF 2020-21 salary data was available at the time of this analysis, CUPA-HR data for the same time period was not. Therefore, this analysis was performed on UCF and CUPA-HR salary data for the 2019-20 period.

SAMPLE

The salary data used for this study were based on subsets, described below, from a total dataset containing faculty data from 1993 - 2019. A total of 1,872 non-administrative, tenure/tenure track, and non-tenure track faculty from data spanning academic years 2014-15 thru 2019-20 were used to analyze historical compression and inversion. Only data from the 2019-20 (n=1,488) year is used as the primary data for CUPA-HR peer comparison and final findings. This data included 297 Professors, 387 Associate Professors, 415 Assistant Professors, and 486 Instructor/Lecturers. The sample does not differentiate faculty who were hired at ranks above assistant versus faculty who were hired as assistant and were promoted through the ranks

A summary of the sample UCF data used in this study is shown below:

Field	Description
ACAD_YEAR	The UCF academic year corresponding with the record year and the salary for that year
COLLEGE	Faculty member's college or broad VP Org Categorization
COLL_DEPT	Faculty member's college and/or college with department.
CIP_CODE	Faculty member's department's corresponding CIP code (6-digit
SALARY_9MO	Employee's contract salary for corresponding year. Includes 9 month equivalence salary for 12 month employees
RANK	Faculty member's (current) rank, long description (collapsed categories)

Salary data from external higher education peers to UCF were gathered from The College and University Professional Association for Human Resources (CUPA-HR). These intuitions were identified based on the following criteria: public, very high research, 4-year degree granting. A list of the institutions used for the peer comparison can be found in Appendix D. Faculty contained in the CUPA-HR data contain only those in non-administrative or coordinator roles.

**UCF* Administrative faculty whose admin codes include Academic Administrator; Deans (including Assistant and Associate Deans); Vice Presidents (including Assistant and Associate VPs and VPs of Research); President; Provost; and Vice Provost; Chair or Director (including Assistant Chairpersons/Directors, Associate Chairpersons/Directors, Program Directors) are excluded - Coordinators remained in the study.

METHOD

RANK RATIO ANALYSIS

Rank ratios were calculated for both UCF faculty and CUPA-HR peer institutions at the Professor, Associate Professor, Assistant Professor, and Instructor/Lecturer ranks for the overall university as well as within CIP discipline for each rank using the following formula:

AVG 9 Month Salary by Rank / AVG 9 Month Salary of All

These rank ratios are then analyzed to identify instances of compression and inversion for both UCF and CUPA-HR peers. Evidence of compression would exist if the difference in ratios between ranks were **≤ 9%.** Inversion would exist if the ratio of a junior or lower rank exceeds that of a higher rank regardless of percentage.

Compression existing at a CIP discipline for both UCF and a CUPA-HR peer is a sign that market forces could be contributing to the compression at UCF. Please note that compression and wage comparisons were created (Appendix A) for all CIP codes named in Appendix B except for:

03 Natural Resources and Conservation, 04 Architecture and Related Services, 05 Area, Ethnic, Cultural, Gender, and Group Studies, 19 Family and Consumer Sciences/Human Sciences, 24 Liberal Arts and Sciences, General Studies and Humanities, 25 Library Science, 28 Military Science, Leadership and Operational Art, 30 Multi/Interdisciplinary Studies, 31 Parks, Recreation, Leisure, Fitness, and Kinesiology, 32 Basic Skills and Developmental/Remedial Education, 47 Mechanic and Repair Technologies/Technicians.

** Note: These CIP disciplines were excluded from analysis due to either no faculty existing at these CIPS in UCF, or the number of faculty in the disciplines were too small to perform an analysis.*

RESULTS

DESCRIPTIVE WAGE ANALYSIS

Prior to analyzing compression, it was important to understand how the wages of faculty at the defined ranks look over an earlier period for UCF. First, we looked at the median salaries of

faculty over the most recent five years to give the first potential clues to potential large-scale compression issues at UCF. As show below in figure 1 below, faculty salaries at the defined ranks have steadily increased over the last five years. In the 2019-20 academic year, Professors made $42,089 more, on average, than Associate Professors make, and was the largest salary differential between faculty ranks. These differential gaps between the ranks have been consistent in the five years prior for both the average and median salaries (figure 1a) as well.

Figure 1 – Average Five-Year Salary Comparison of UCF Faculty by Rank

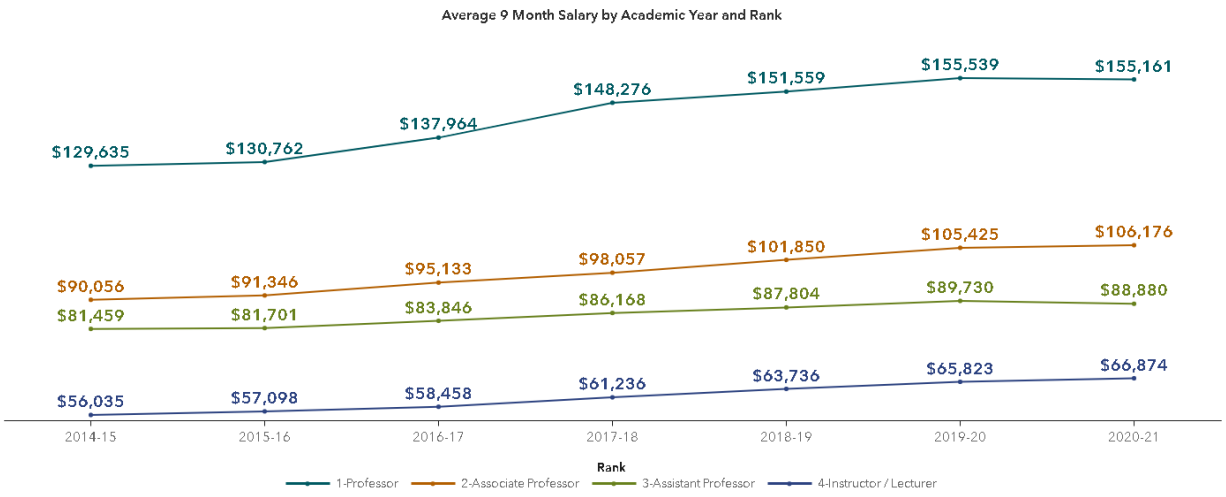
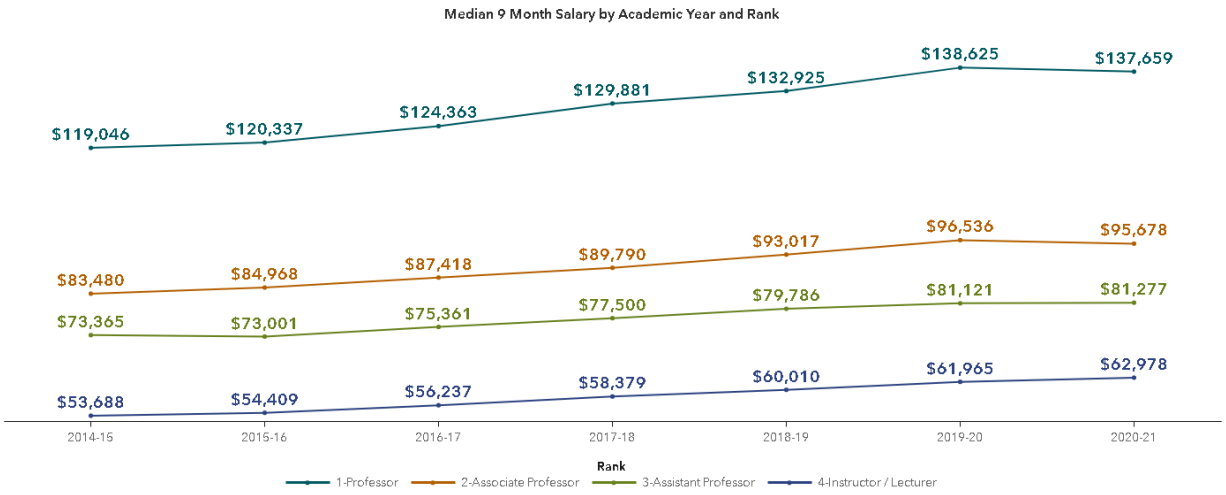


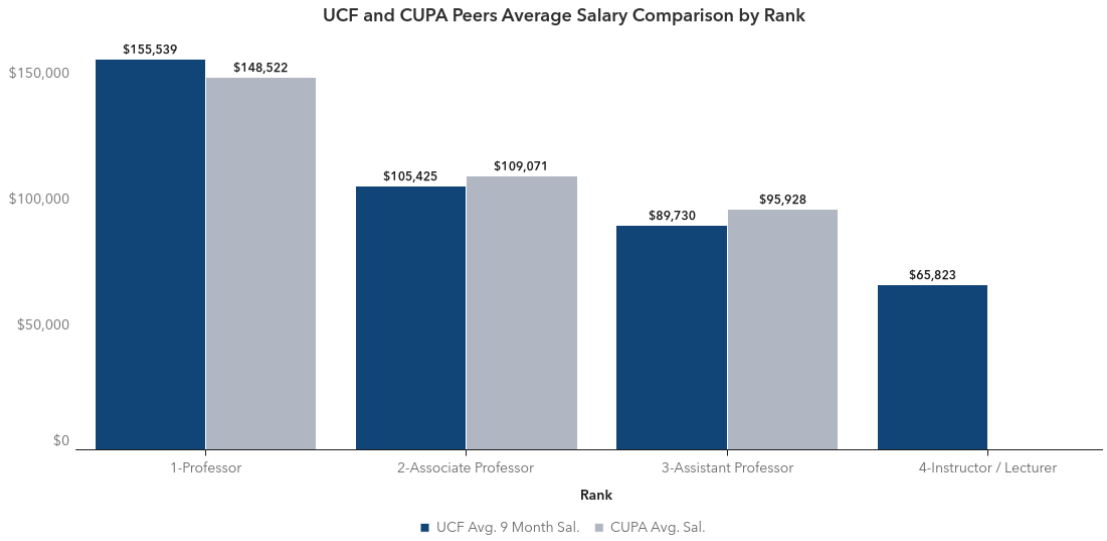
Figure 1a – Median Five-Year Salary Comparison of UCF Faculty by Rank



Comparing the salaries of UCF faculty to their peers (figures 2 and 2a), we see that UCF faculty at the Associate and Assistant ranks are compensated less than their respective peers are at

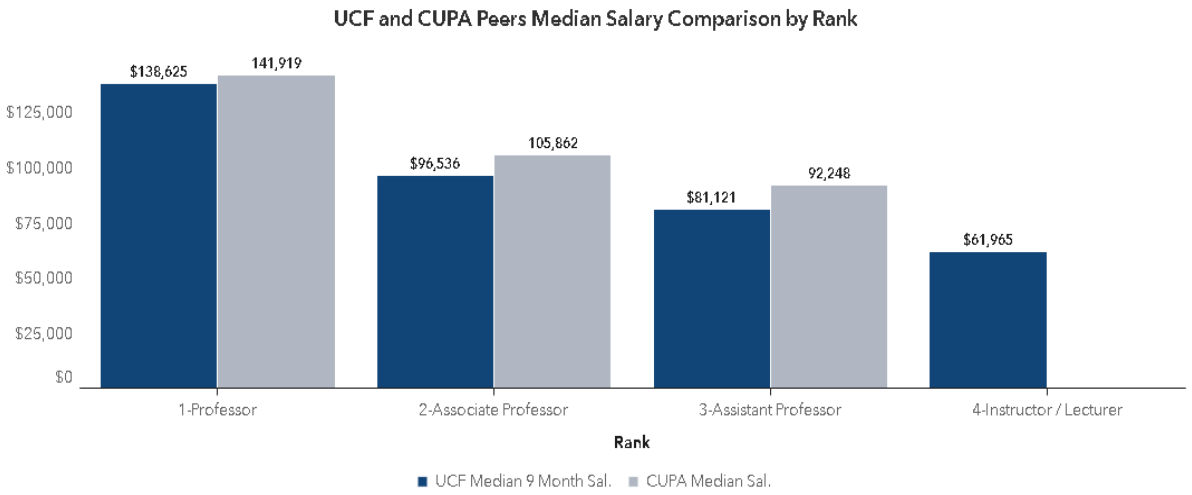
other institutions. However, the comparison does show that Professors at UCF are being paid slightly more than their peers on average overall. CUPA institutions did not report data for the Instructor/Lecturer category, so no comparison can be made. Median salary data tells a different story with UCF lagging behind their peers at all ranks. While this compensation disparity is not universal across all CIP disciplines, most of the disciplines show this behavior thus resulting in these wage dynamics. The CUPA-HR data did not provide salary data on the Instructor/Lecturer rank, so an analysis of faculty at this level was not made.

Figure 2 – UCF and CUPA Peers Average Salaries by Rank for 2019



UCF Average Salary % difference from CUPA Full Professor greater 4.72%, Associate Professor less 3.34%, Assistant Professor less 8.55%, and Instructor/Lecture are paid 31.39% LESS than Assistant Professors at CUPA institutions.

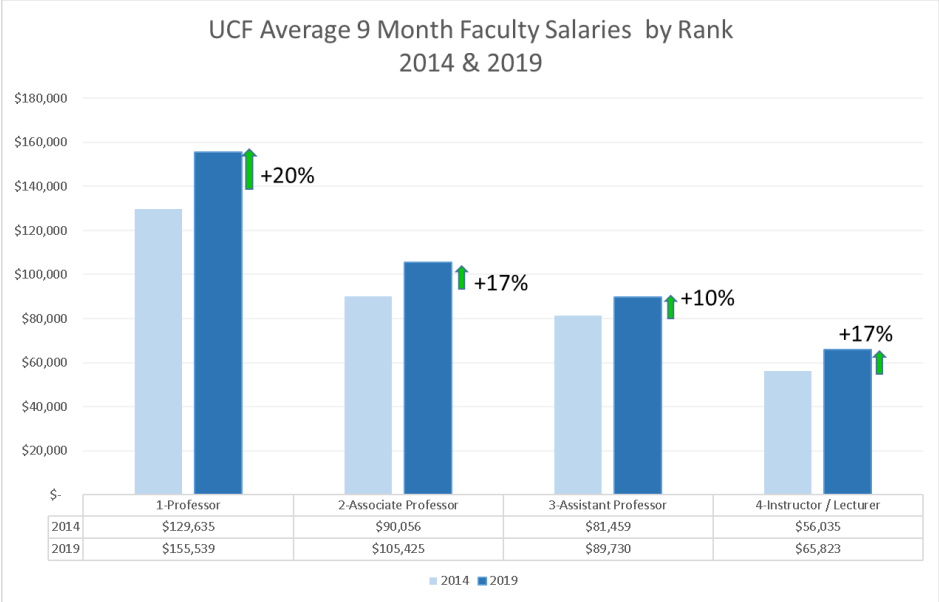
Figure 2a – UCF and CUPA Peers Median Salaries by Rank for 2019



UCF Median Salary % difference from CUPA Full Professor less 4.72%, Associate Professor less 8.81% and Assistant Professor less 12.06%. Instructor/Lecture are paid 32.83% LESS than Assistant Professors at CUPA institutions.

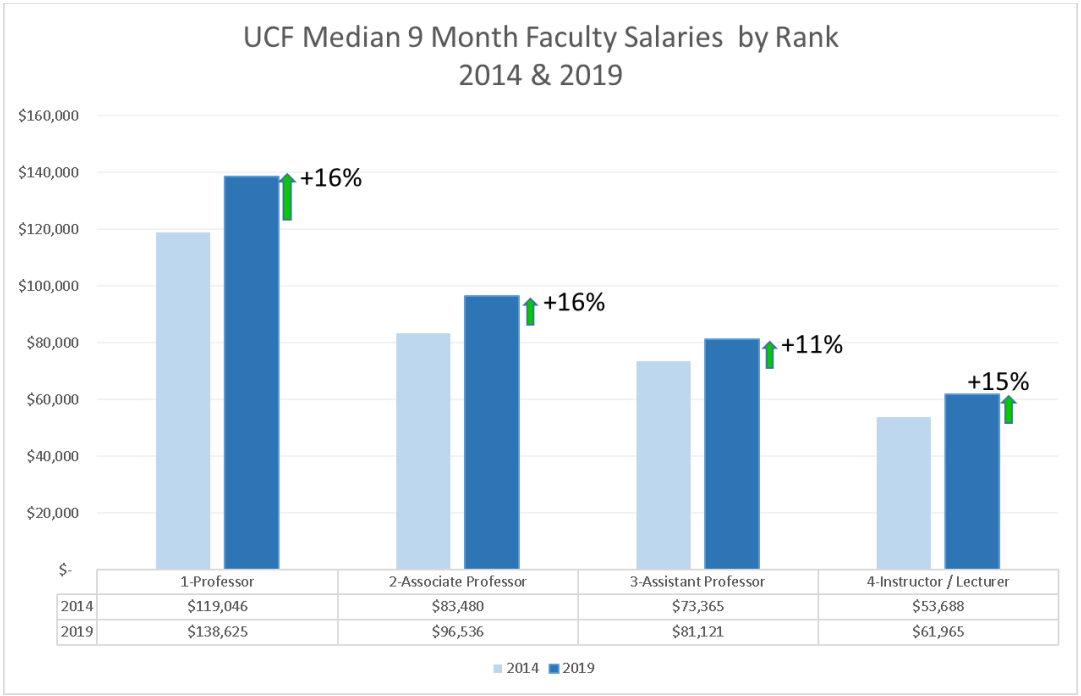
Another area of interest from the committee was to evaluate if UCF faculty salaries were keeping pace with inflation over the years. To investigate, a descriptive analysis was performed on UCF faculty wages for 2014 and 2019. The cumulative rate of inflation was calculated as 8.92% from the Bureau of Labor Statistics and the Consumer Price Index (CPI-U) for Urban areas using the 2014 and 2019 years. Based on the analysis, Professors, Associate Professors, Assistant Professors and Instructor/Lecturers all have average and median 9-month salaries in 2019 that exceed the cumulative rate of inflation from 2014 of 8.92% (figures 3 and 3a). This same outcome occurs when comparing both lower (figure 3b) and upper quartile (figure 3c) salaries from each year.

Figure 3 – UCF Average Faculty Salaries, 2014 and 2019



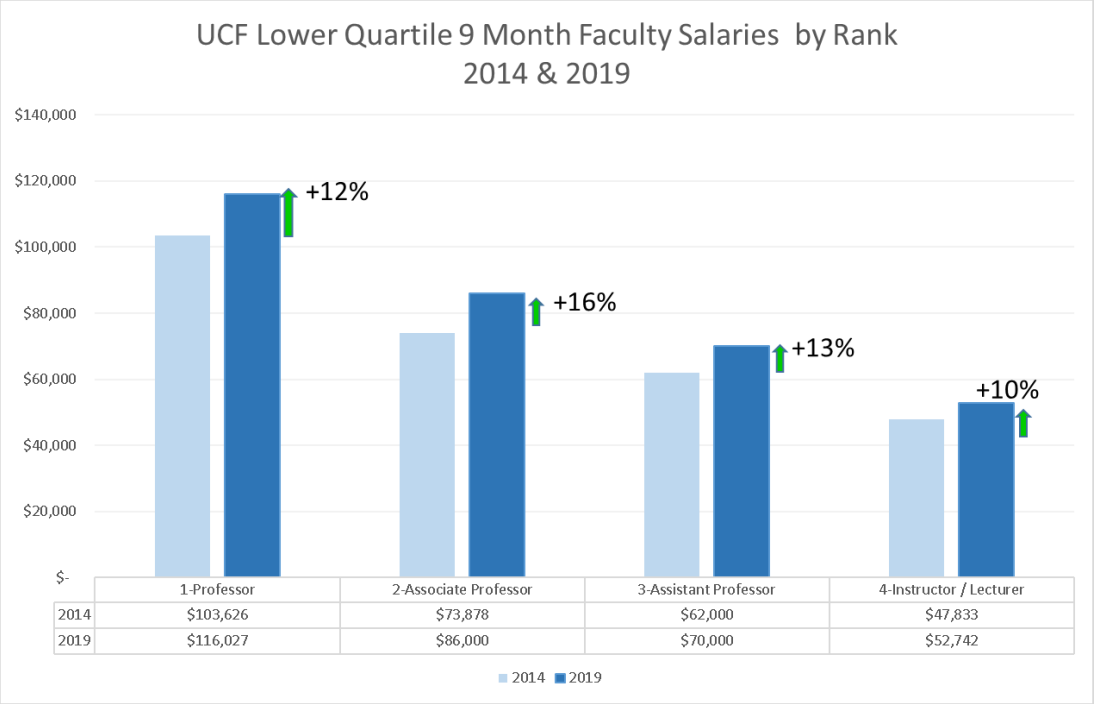
Average Over time period: Full Professor increase 19.98%, Associate Professor increase 17.07%, Assistant Professor increase 10.15%, Instructor/Lecture increase 17.47%, CPI-U increase (Nov 2014 to Nov 2019) 8.92%

Figure 3a – UCF Median Faculty Salaries, 2014 and 2019



Median Over time period: Full Professor increase 16.45%, Associate Professor increase 15.64%, Assistant Professor increase 10.57%, Instructor/Lecture increase 15.42%, CPI-U increase (Nov 2014 to Nov 2019) 8.92%

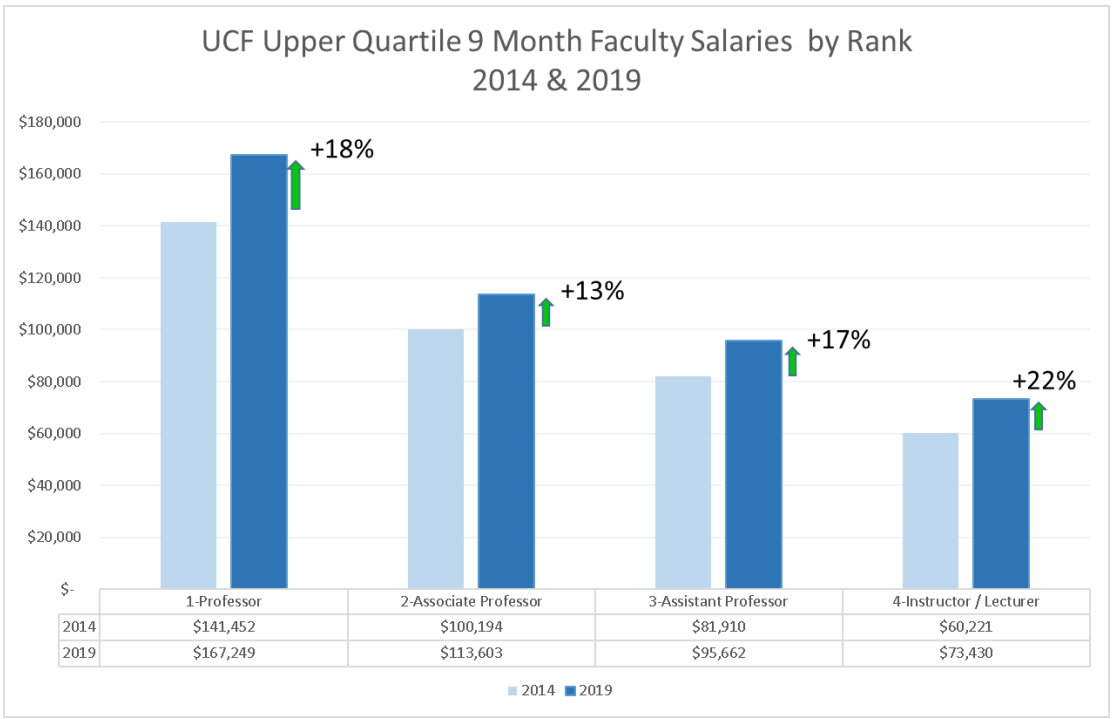
Figure 3b – UCF Lower Quartile Salaries, 2014 and 2019



	1-Professor	2-Associate Professor	3-Assistant Professor	4-Instructor / Lecturer
2014	$103,626	$73,878	$62,000	$47,833
2019	$116,027	$86,000	$70,000	$52,742

Lower Quartiles Over time period: Full Professor increase 11.96%, Associate Professor increase 16.41%, Assistant Professor increase 12.91% Instructor/Lecture increase 10.26% CPI-U increase (Nov 2014 to Nov 2019) 8.92%

Figure 3c – UCF Upper Quartile Salaries, 2014 and 2019

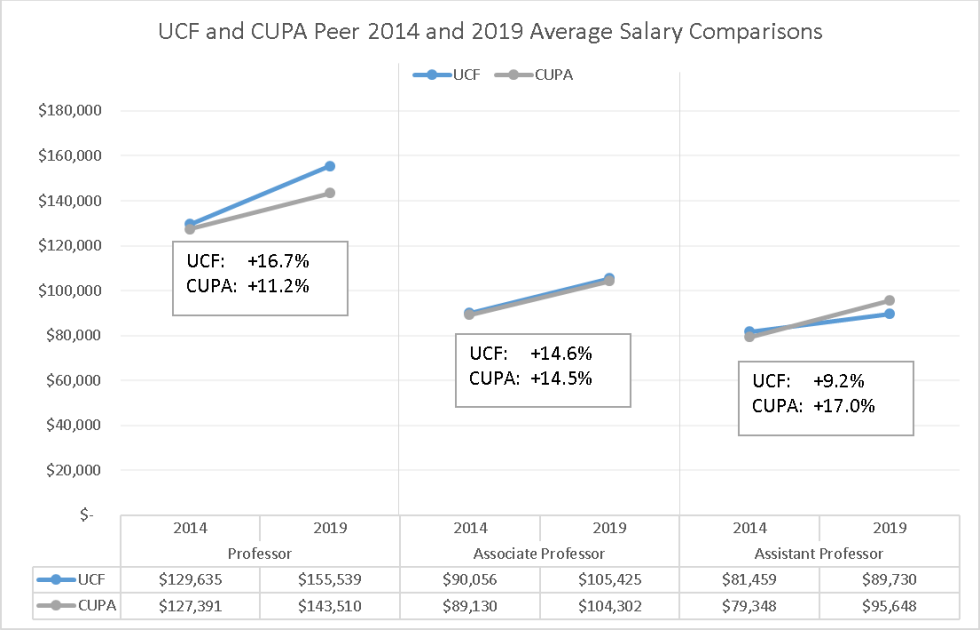


	1-Professor	2-Associate Professor	3-Assistant Professor	4-Instructor / Lecturer
2014	$141,452	$100,194	$81,910	$60,221
2019	$167,249	$113,603	$95,662	$73,430

Upper Quartiles Over time period: Full Professor increase 18.24%, Associate Professor increase 13.38%, Assistant Professor increase 16.79%, Instructor/Lecture increase 21.93% CPI-U increase (Nov 2014 to Nov 2019) 8.92%

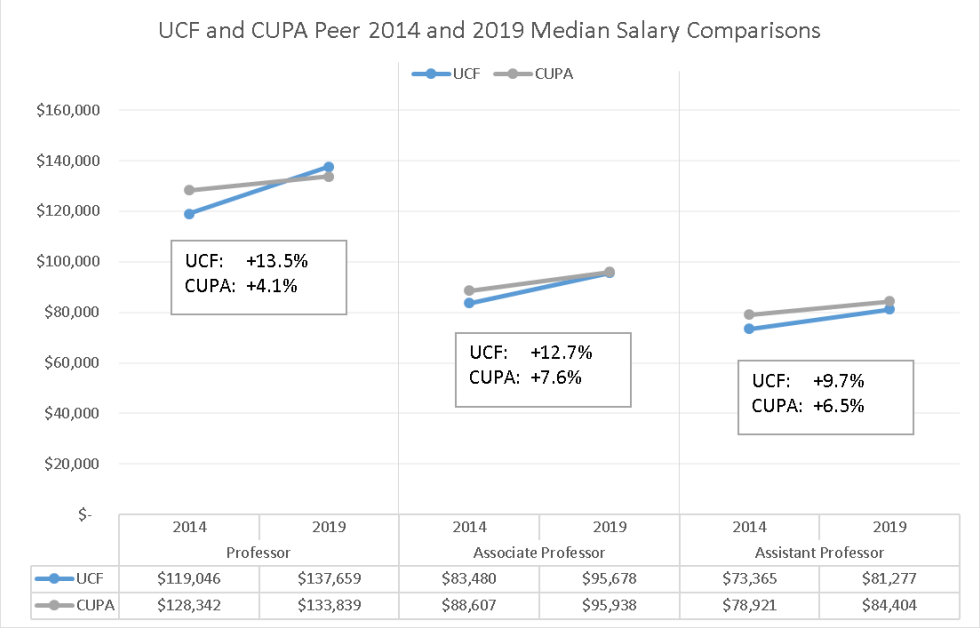
While UCF faculty have kept pace with inflation, a comparison with CUPA peers warrants an investigation. Figures 3d and 3e show UCF faculty salary, by rank, compared to CUPA peer faculty for 2014 – 2019. As is shown, Professors have exceeded the pace of increases relative to their CUPA peers. Associate and Assistant faculty have largely kept pace when looking at median salaries. However, there is evidence to suggest that average Assistant Professor salaries have not kept pace with CUPA peers.

Figure3d – UCF and CUPA Peer 2014 and 2019 Salary Comparisons (average)



	2014 Professor	2019 Professor	2014 Associate Professor	2019 Associate Professor	2014 Assistant Professor	2019 Assistant Professor
UCF	$129,635	$155,539	$90,056	$105,425	$81,459	$89,730
CUPA	$127,391	$143,510	$89,130	$104,302	$79,348	$95,648

Figure3e – UCF and CUPA Peer 2014 and 2019 Salary Comparisons (median)



	2014 Professor	2019 Professor	2014 Associate Professor	2019 Associate Professor	2014 Assistant Professor	2019 Assistant Professor
UCF	$119,046	$137,659	$83,480	$95,678	$73,365	$81,277
CUPA	$128,342	$133,839	$88,607	$95,938	$78,921	$84,404

Further analysis on salary performance between 2014 and 2019 was performed by comparing UCF faculty with the Employment Cost Index (ECIC) for compensation in Education, the CPI-U index for Urban Areas, and the CUPA peers. This additional summary analysis looked at only

faculty who were employed both in 2014 and 2019 (n=875), and how many faculty by rank were above or below the index rate differences. This data is available in Appendix F.

COMPRESSION AND INVERSION RANK RATIO ANALYSIS

Rank ratios were calculated for UCF and for the CUPA-HR peers by overall and at the 2- digit CIP discipline level for the 2019 academic year. As shown in figure 4 below, a comparison of salaries (not including CIP) by rank (Professor, Associate Professor, Assistant Professor, and Instructor/Lecturer) for all UCF faculty members, does show a steady increase in salary as faculty move up in rank. Figure 5 shows that while rank ratio behavior at UCF looks to be consistent for the most recent five years since 2014, the ratio differences have changed. Based on the data, the ratio of Professors has increased the wage gap by 4% points over Associate Professors while the wage gap between the Associate and Assistant Professors has widened by 5% due almost entirely due to a drop in Assistant Professor relative salary. Lastly, the wage gap between Instructor/Lecturers with Assistant Professors has actually shrunk by 6%, almost entirely due to the fore mentioned 5% drop in relative salary.

Figure 4 – UCF and CUPA Peers Rank Ratio Analysis for 2019

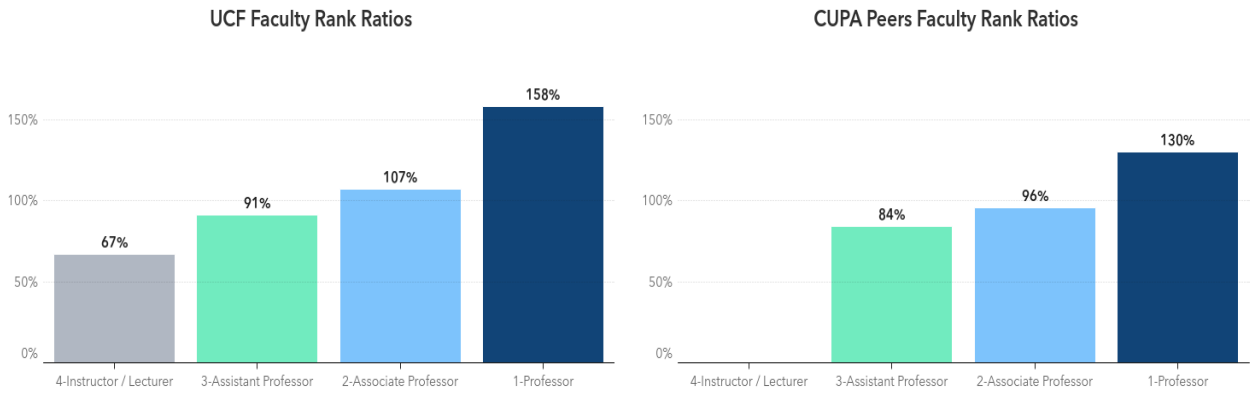
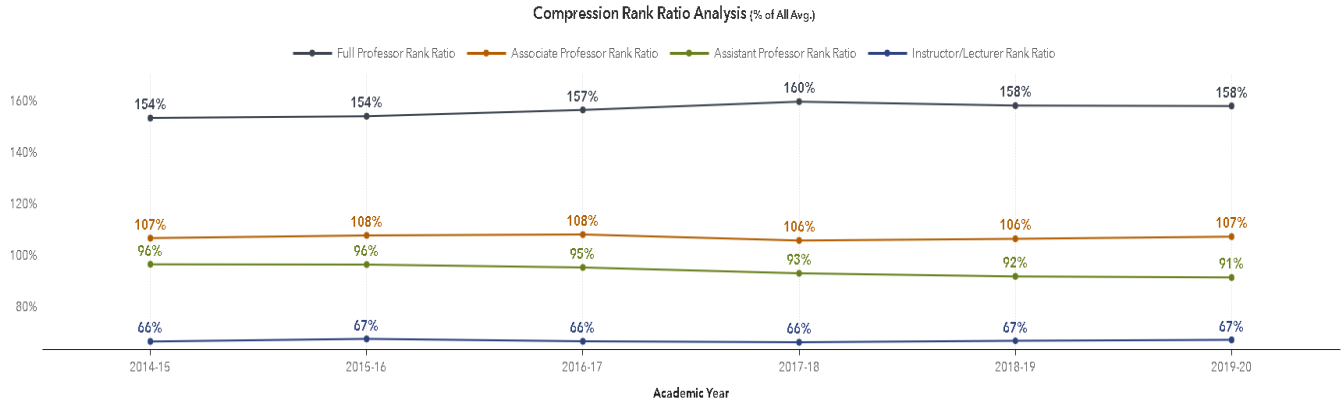


Figure 5 – UCF Rank Ratios by Rank 2014 - 19



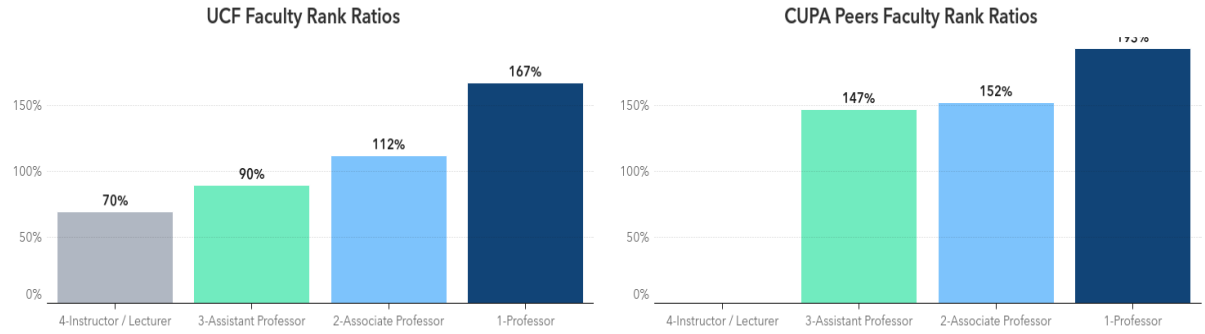
As with UCF, peer group faculty also show a steady increase in salary as faculty move up the ranks (figure 4). Both show that each successive rank earns a higher percentage of the group average salary with Professors earning the highest salaries. Thus, according to the already defined compression definition, neither UCF at the university level nor CUPA peers overall, shows evidence of compression among faculty.

As an example, when looking at rank ratio at the 2-digit CIP level (figure 6), we see that 52, Business, Management, Marketing, and Related Support Services, shows evidence of compression with respect to CUPA peers at the Associate and Assistant ranks. UCF does not show this same phenomenon for their faculty at this discipline for any ranks. However, peer institutions at this CIP level compensate Associate and Assistant Professors (on average) $23,000 and $46,261 more than UCF faculty at the same discipline and faculty ranks respectively (Appendix A).

**Rank ratio comparisons for 21 of the 32 CIP codes along with their respective 2019 salary comparisons is shown in Appendix A.*

Figure 6 – CIP 52 Rank Ratio Analysis

CIP 52, Business, Management, Marketing, and Related Support Services



For CIP 50, Visual and Performing Arts (figure 7) and CIP 44 Public Administration (figure 7a), the difference between the Assistant and Instructor/Lecturer ranks are both less than 9% which indicates possible compression. These CIP's would warrant monitoring going forward due to the distance in their ratios (within 9%). Because peer data did not give salary information at the instructor level, this study cannot ascertain if this behavior at this CIP level is possibly market driven or not.

Figure 7 – CIP 50 Rank Ratio Analysis

CIP 52, Visual and Performing Arts

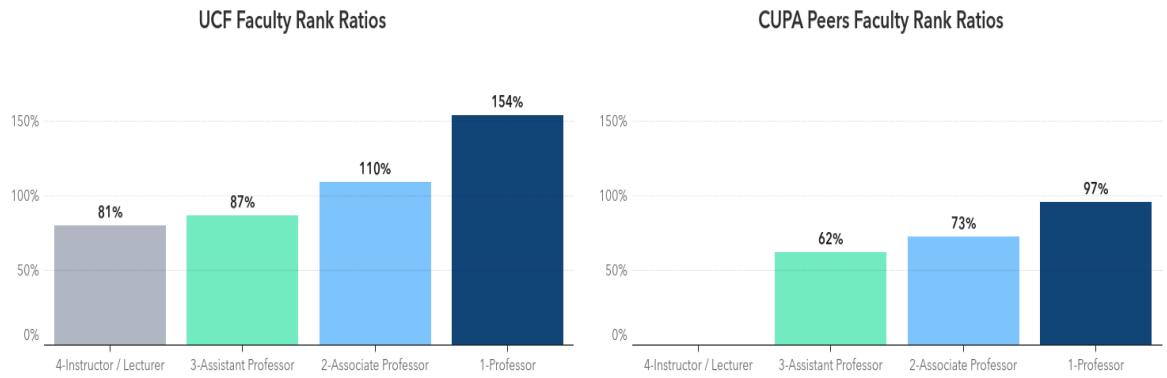
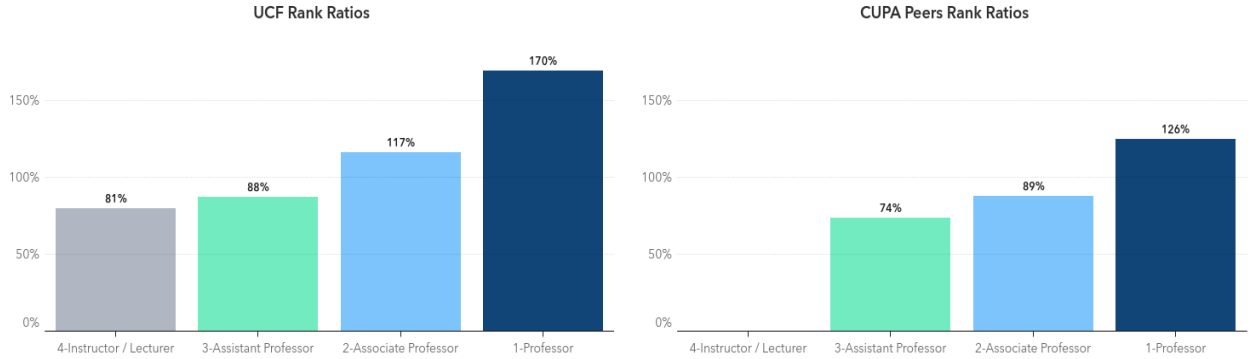


Figure 7a – CIP 44 Rank Ratio Analysis

CIP 44, Public Administration



CIP's 11 (Computer and Information Sciences) and 43 (Homeland Security, Law Enforcement), while not displaying obvious compression, are showing that there is evidence for concern because the difference in ratios are right at 9%. For CIP 11 (figure 7b), the difference between Assistant Professors and Associate Professors are 9%, while in CIP 43 (figure 7c), the same percentage difference occurs between Instructor/Lecturers and Assistant Professors.

Figure 7b – CIP 11 Rank Ratio Analysis

CIP 11, Computer and Information Sciences

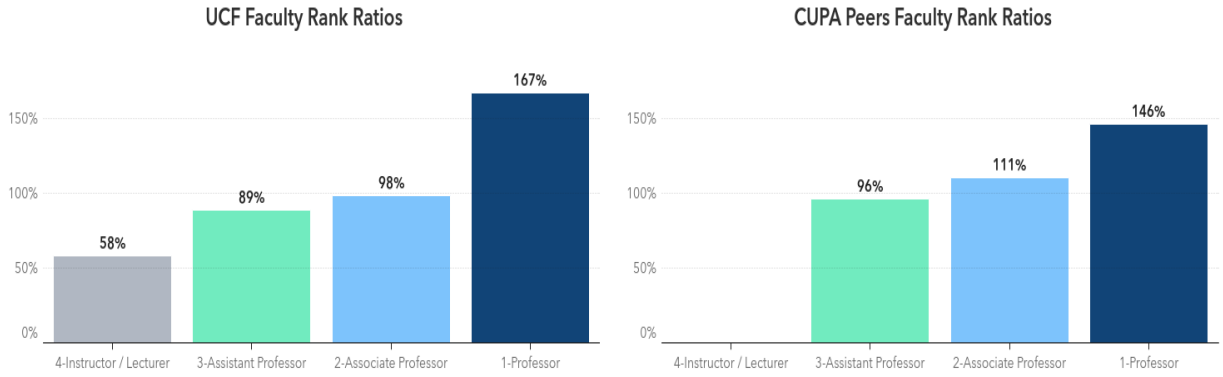
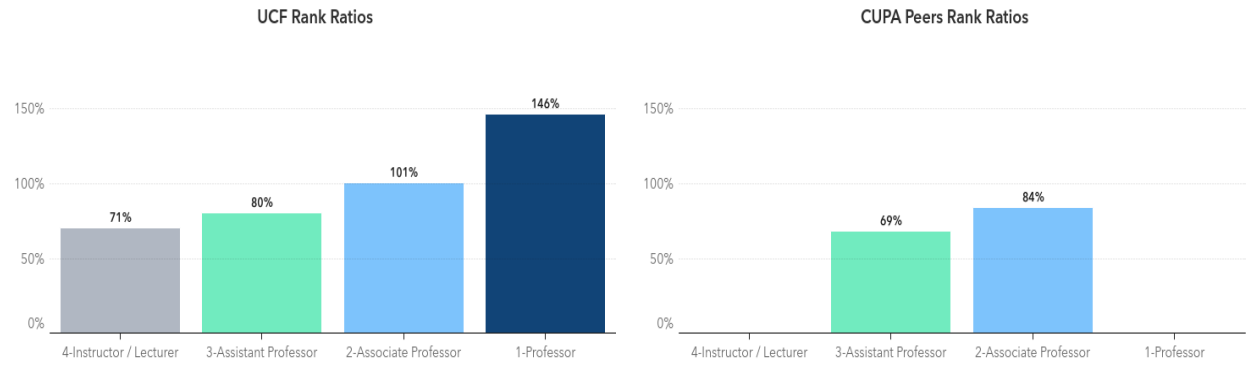


Figure 7c – CIP 43 Rank Ratio Analysis

CIP 43, Homeland Security, Law Enforcement



CONCLUSIONS AND RECOMMENDATIONS

While the Committee found little severe evidence of compression as defined by the resolution, what was found may even more serious and that is growing wage gaps within the University.

For example:

Please note that only faculty who were with UCF in both 2014 and 2019 are included here

- **UCF Professor average salaries increased 16.7% while CUPA-peer Professor salaries increased only 11.2%.**
- **Professor wage growth contrasts first with UCF Associate Professor where** 90 UCF Associate Professors who (29.4%) did not keep pace with CUPA-peer Associate Professors average salary increases. At the same time, the median salary of UCF Associate Professors is 8.81% less than the median salary of CUPA-peer Associate Professors.
- **Additionally UCF Assistant Professor average salaries wage growth of 9.2% fell behind** CUPA peers Assistant Professors whose salaries increased 17.0%. UCF Assistant Professors average salary is 6.46% less than the average salary of CUPA-peer Assistant Professors. 32 UCF Assistant Professors (53.3%) did not keep pace with CUPA-peer average salary increases. The median salary of UCF Assistant Professors is 12.06% less than the median salary of CUPA-peer Assistant Professors.
- **The growing wage gap is further amplified by the fact that 199 or 22.7% of the UCF Professor, Associate Professor, Assistant Professor, and Instructor/Lecturer average salaries did NOT keep pace with to Employment Cost Index for Education (2014-2019) salary increase of +12.5%.**

This underscores the need for a comprehensive review of UCF's wage compensation and incentive policies.

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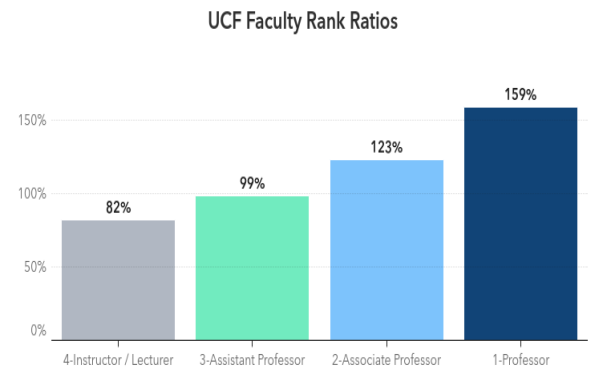
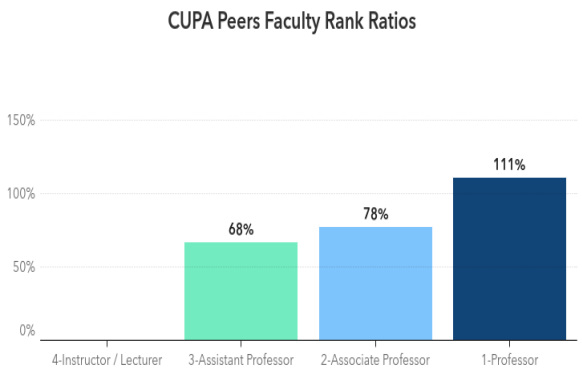
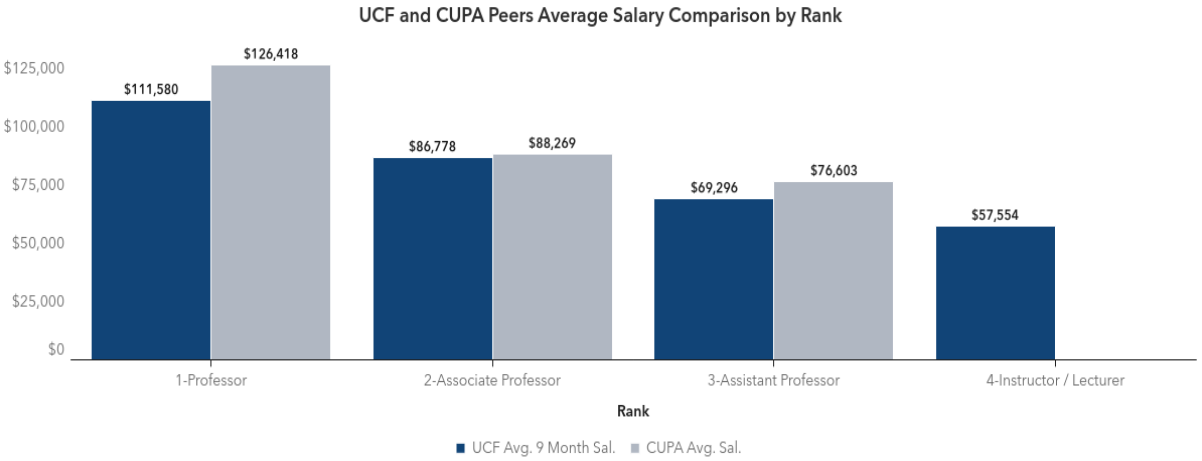
APPENDIX A – 2019 RANK RATIO COMPARISONS BETWEEN UCF AND CUPA-HR PEERS BY 2-DIGIT CIP

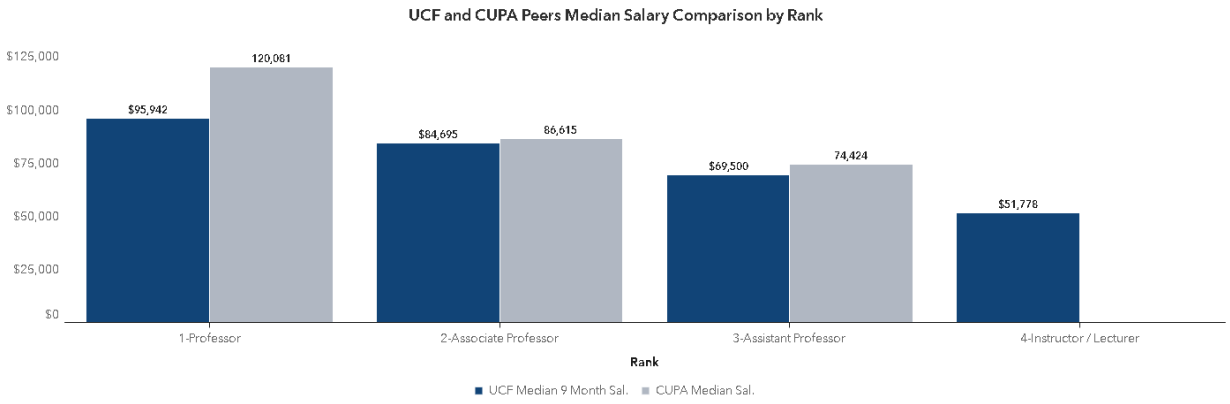
Note: Rank ratios were calculated for both UCF faculty and CUPA-HR peer institutions at the Professor, Associate Professor, Assistant Professor, and Instructor/Lecturer ranks for the overall university as well as within CIP discipline for each rank using the following formula: AVG 9 Month Salary by Rank / AVG 9 Month Salary of All

CIP 09, Communication, Journalism, and Related Programs

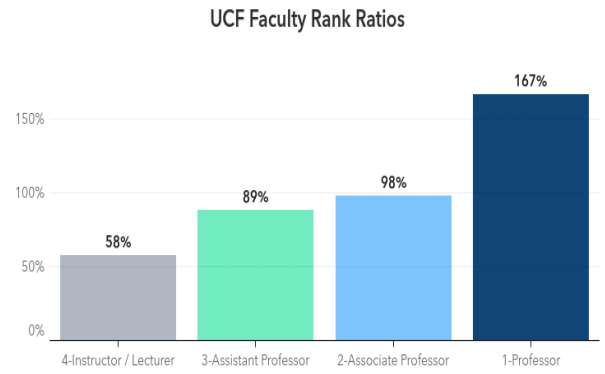


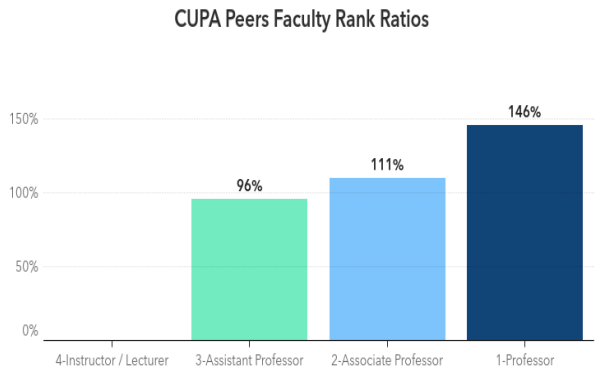


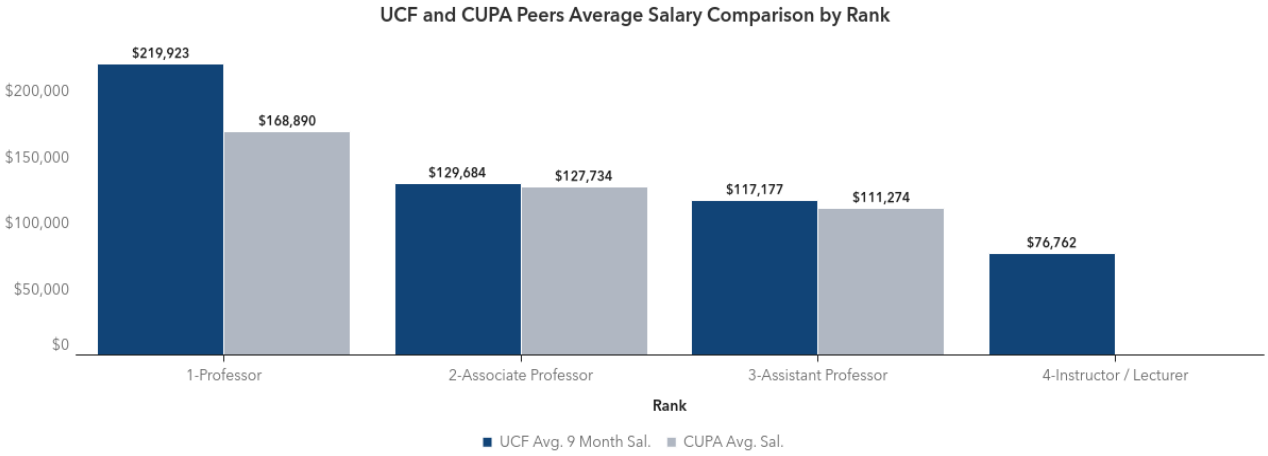


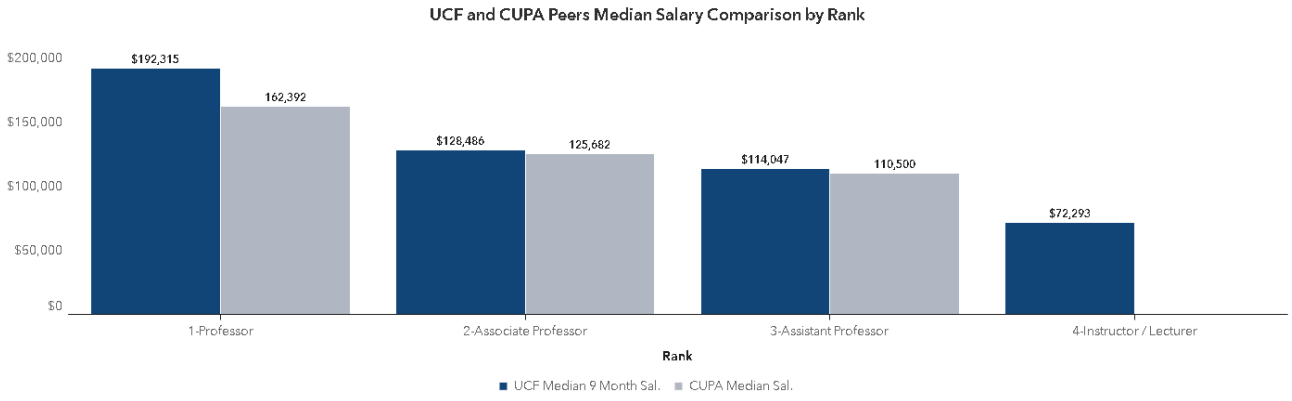


CIP 11, Computer and Information Sciences and Support Services

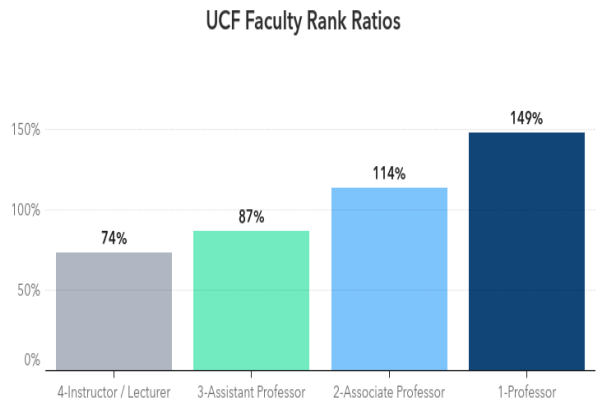


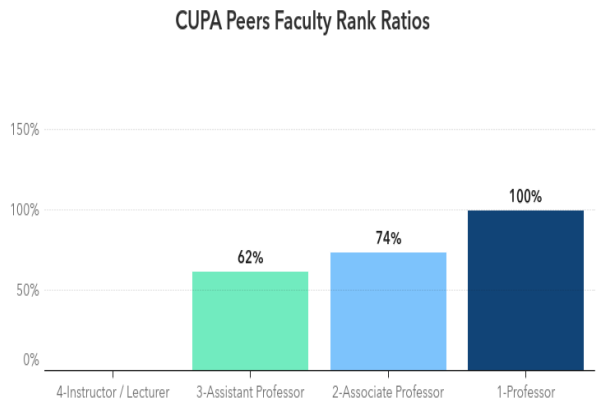


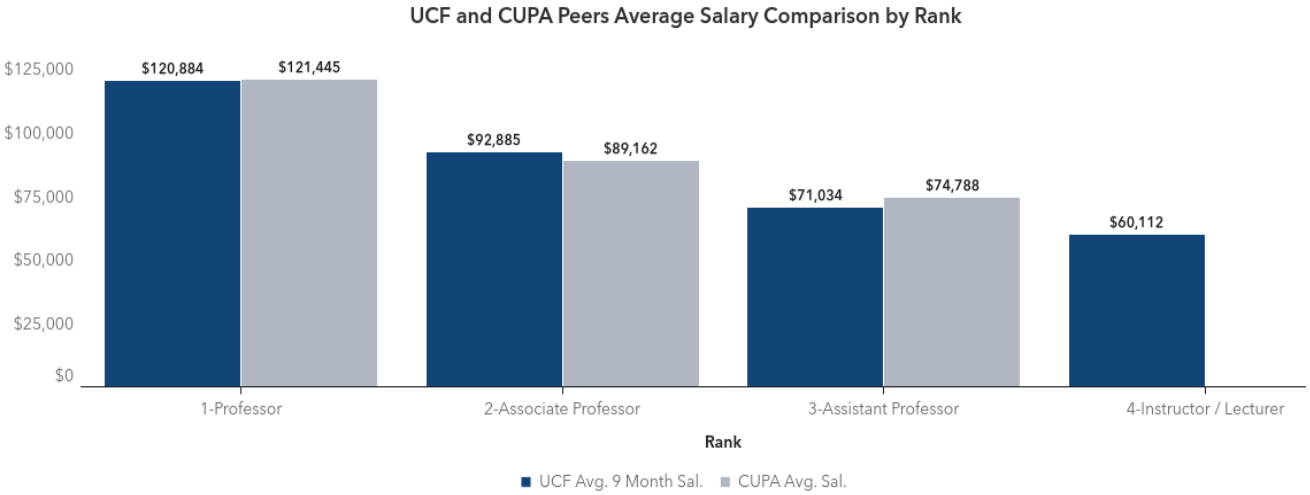


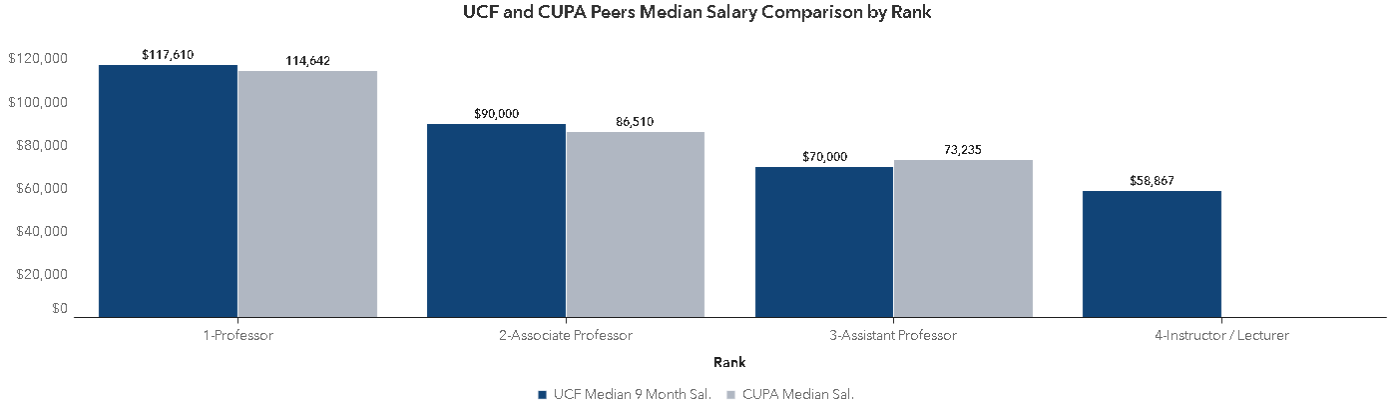


CIP 13, Education

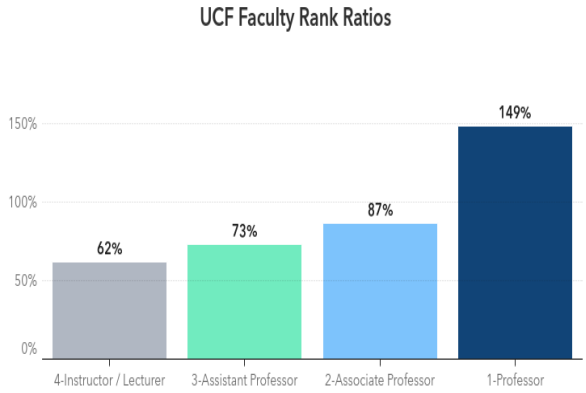


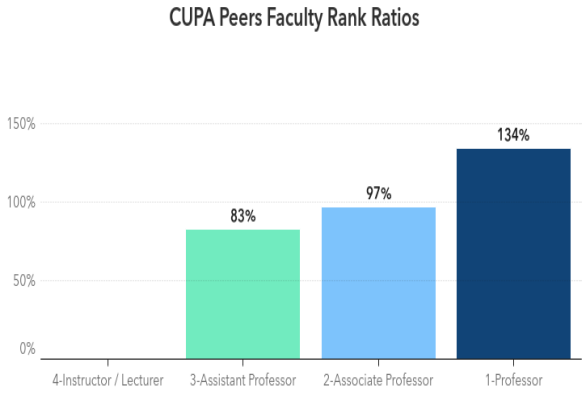


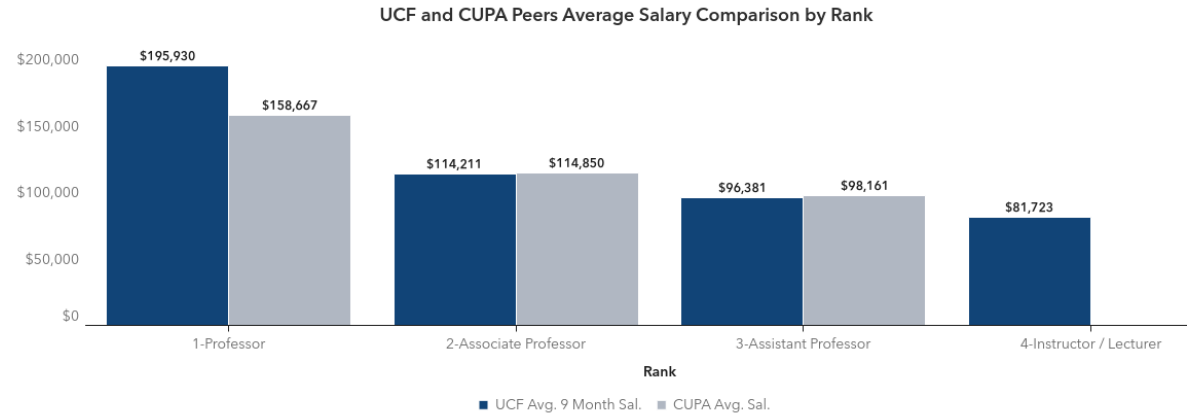


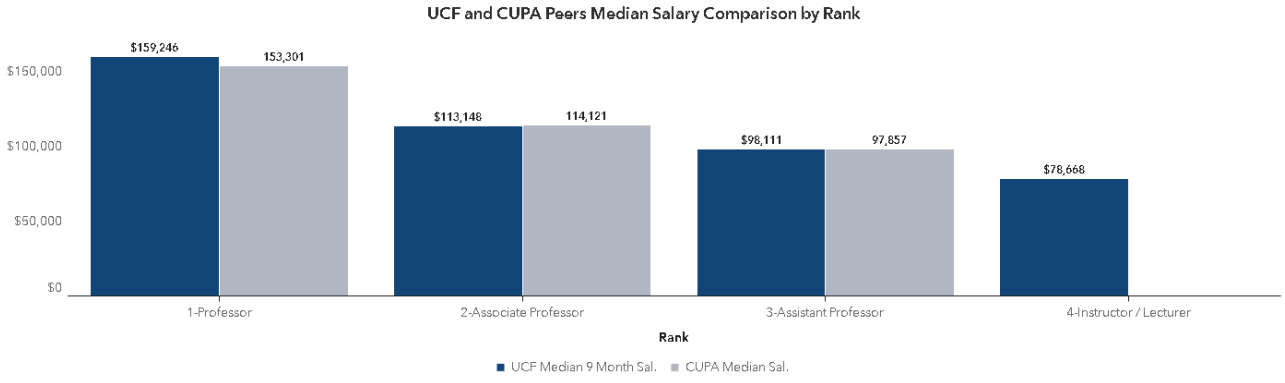


CIP 14, Engineering

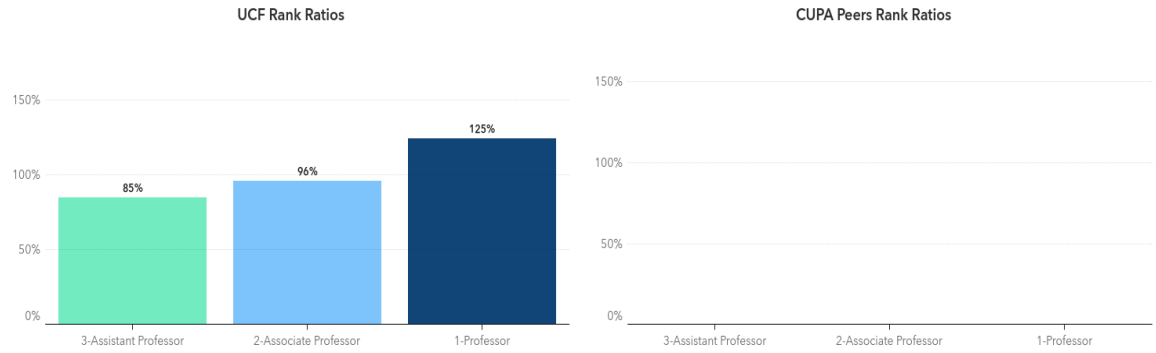


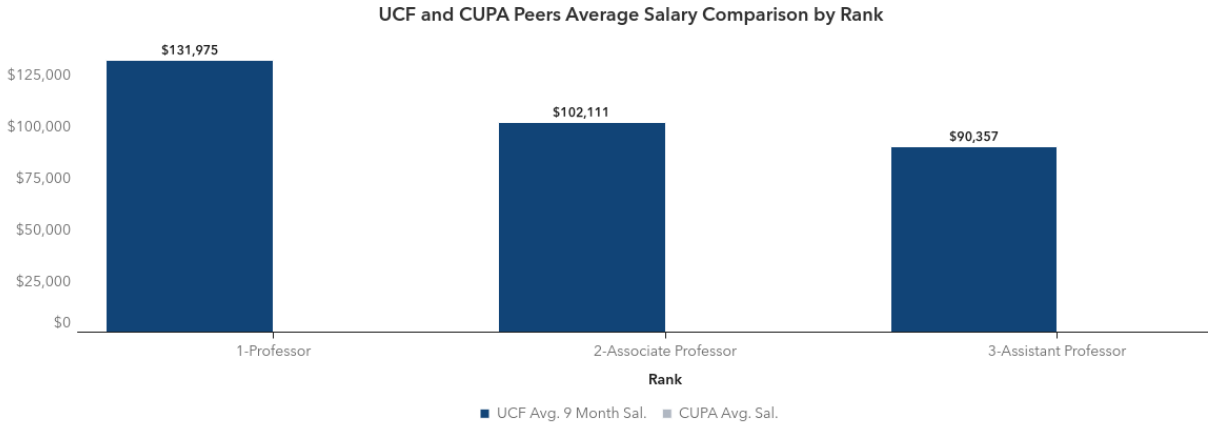


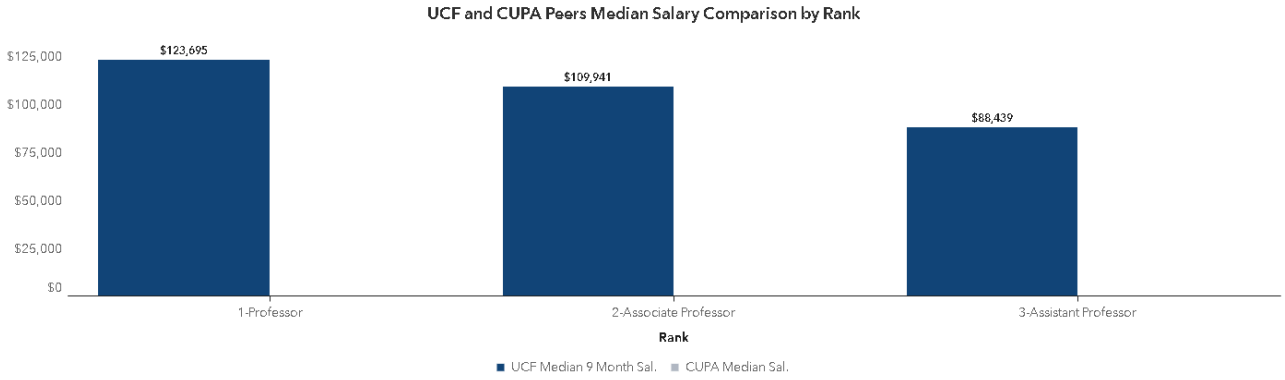




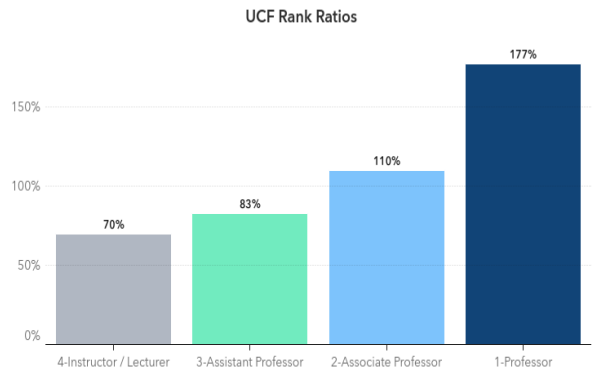
CIP 15, Engineering/Engineering-Related Technologies/Technicians

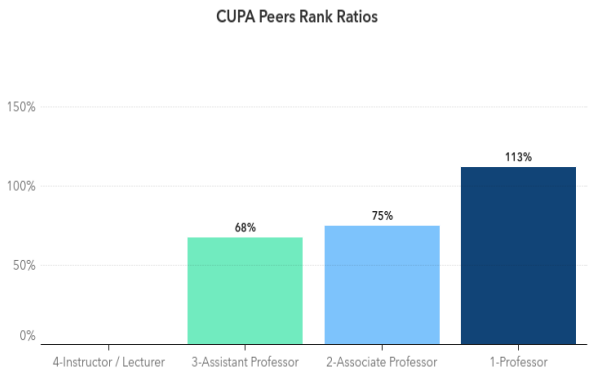


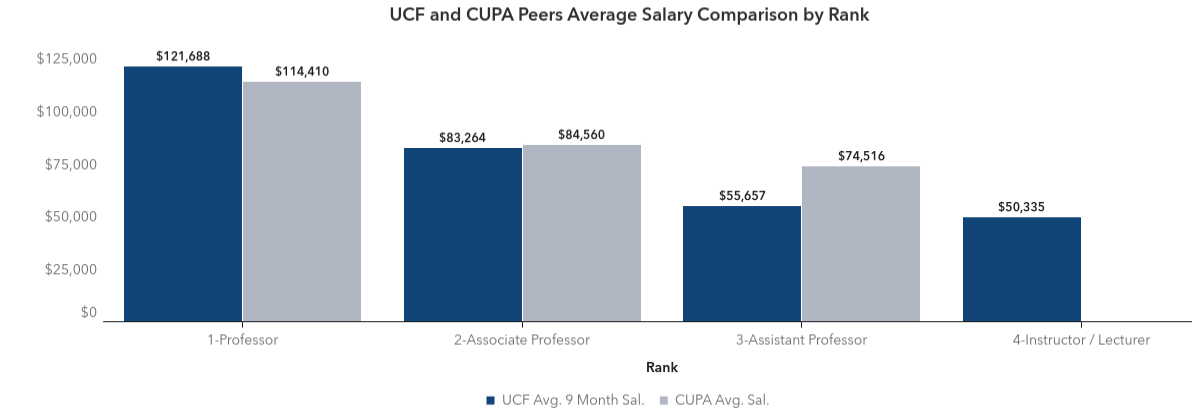


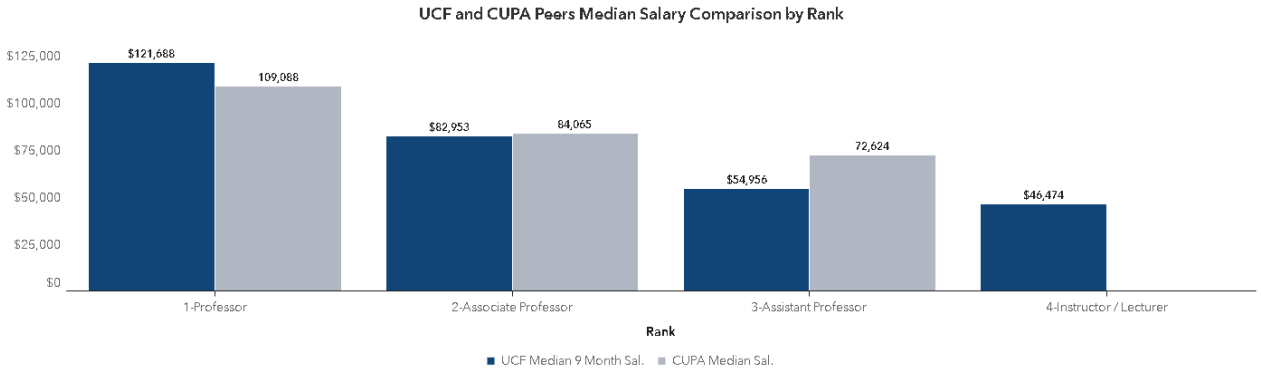


CIP 16, Foreign Languages, Literatures, and Linguistics

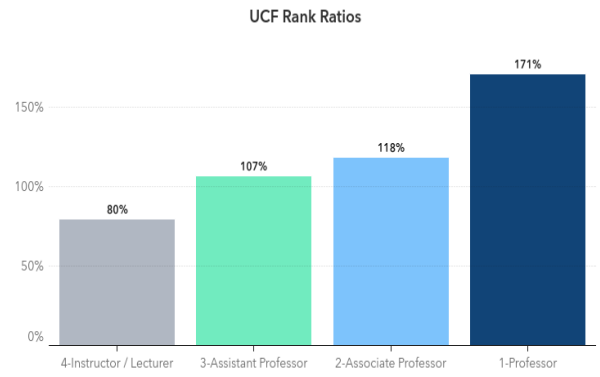


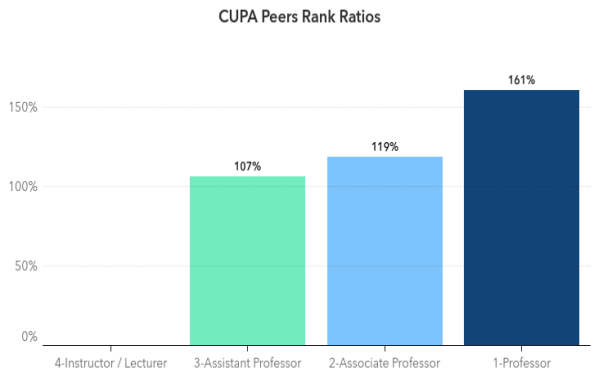


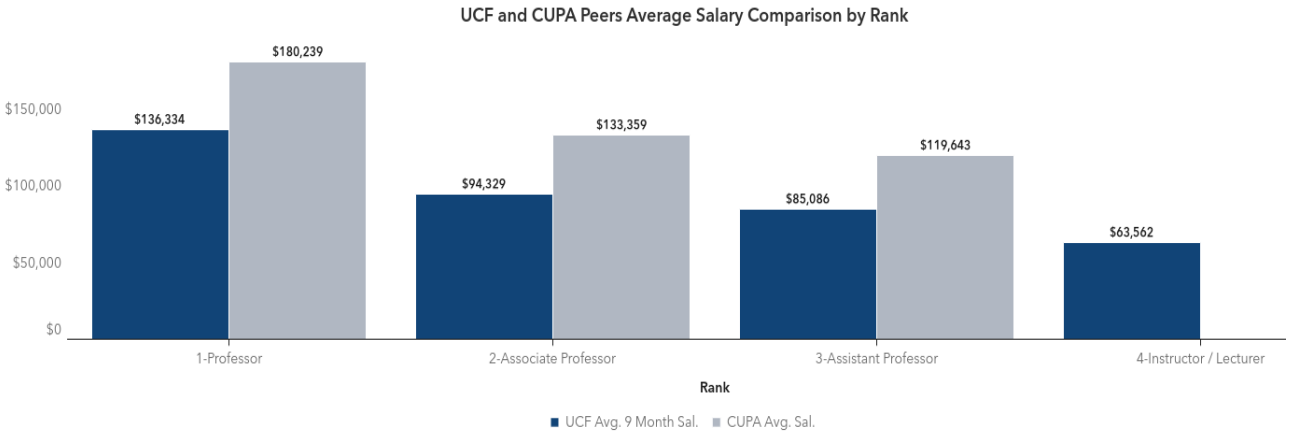


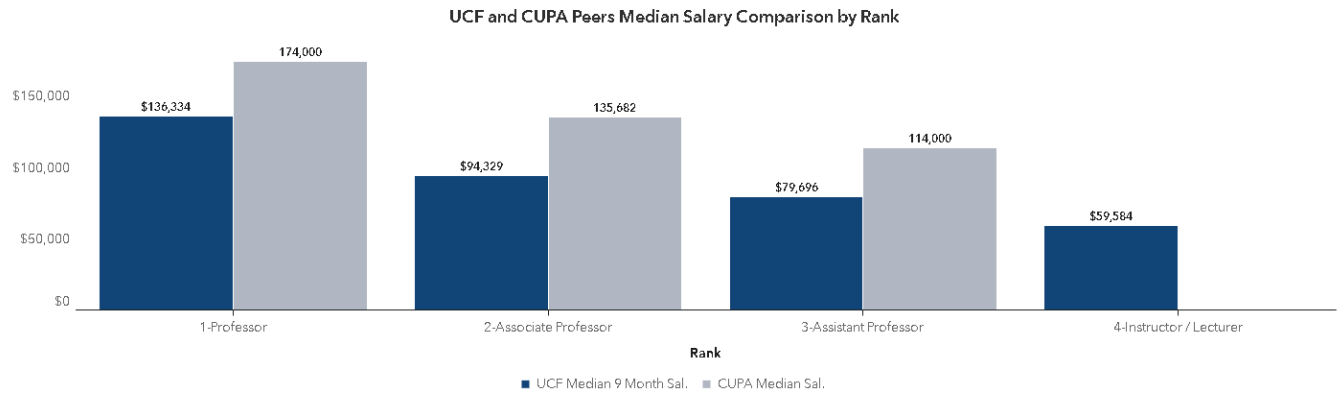


CIP 22, Legal Professions and Studies

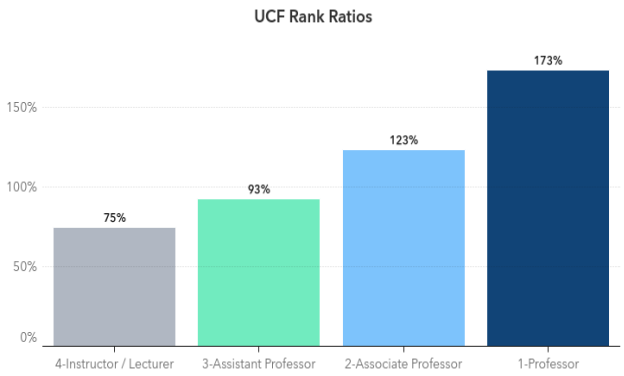


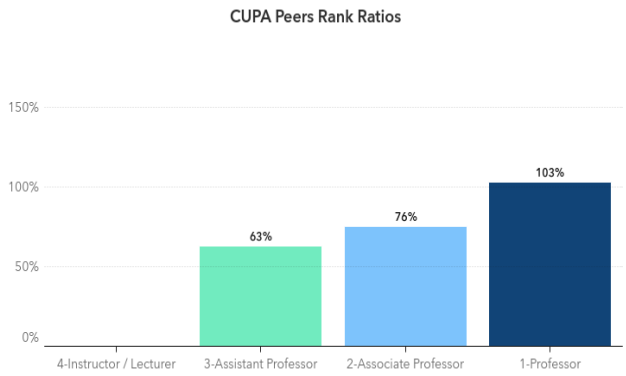


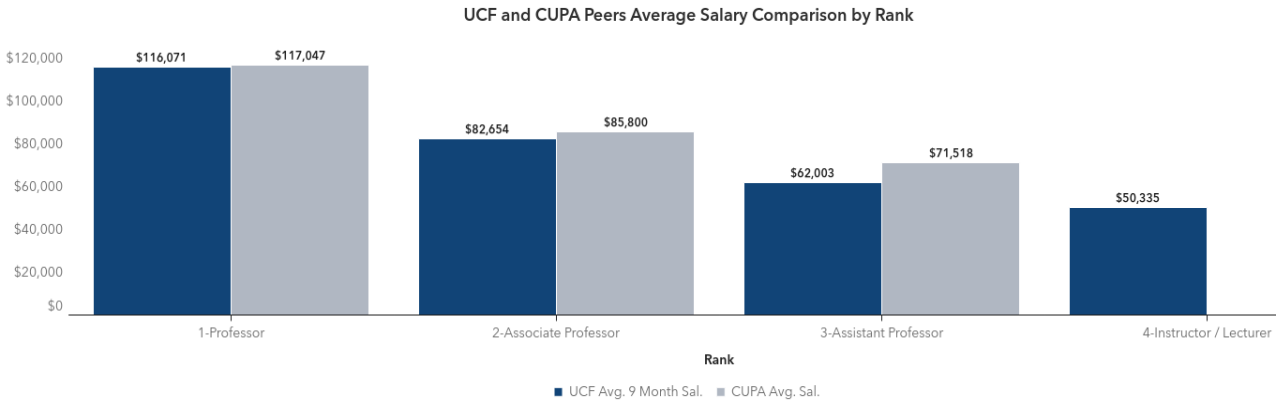


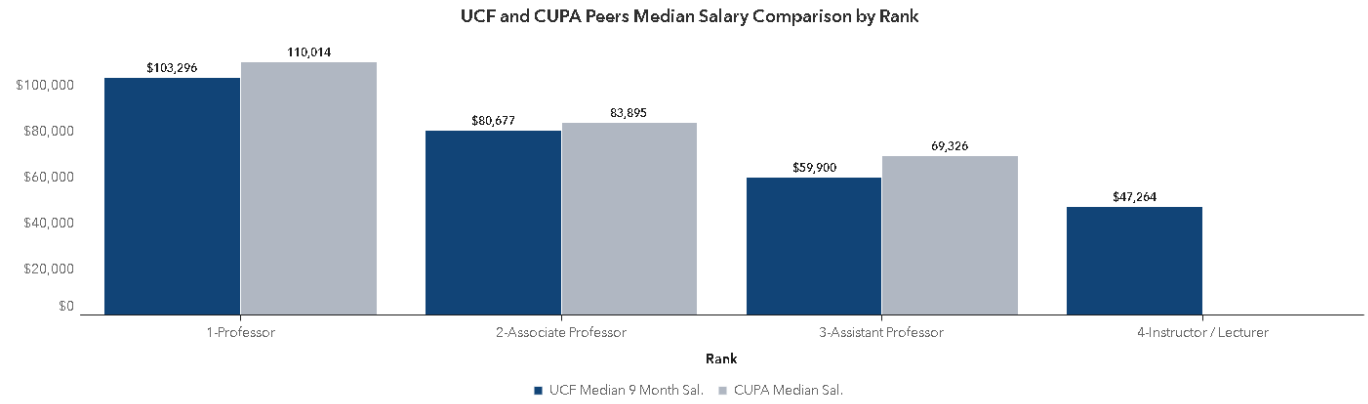


CIP 23, English Language and Literature/Letters

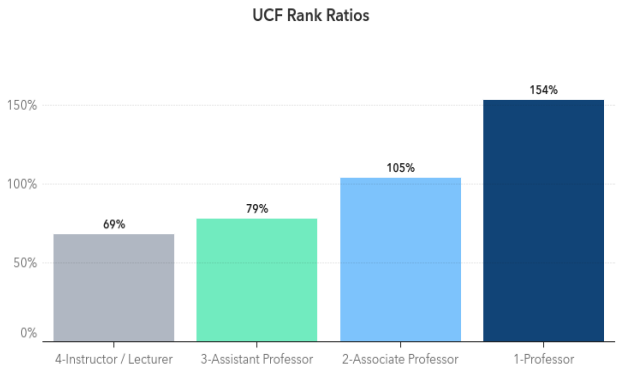


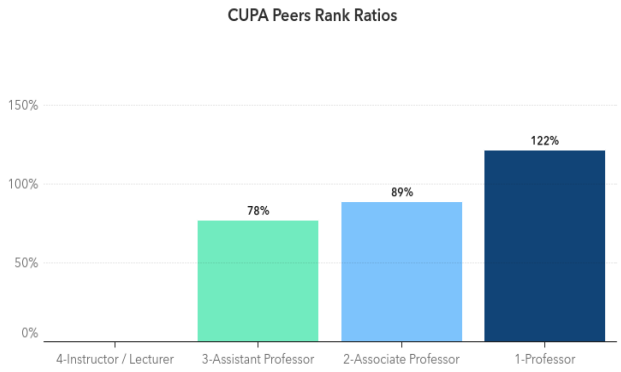


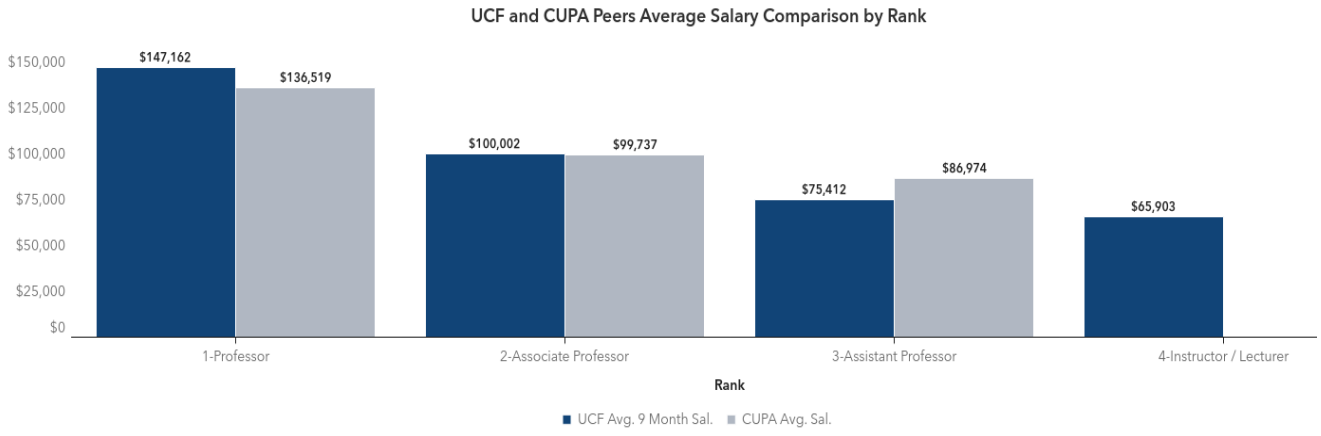


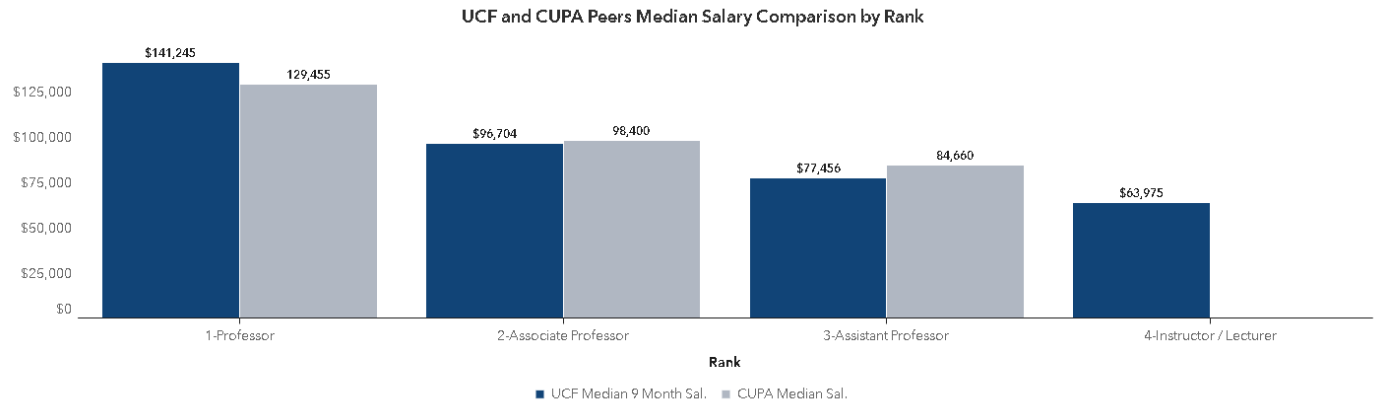


CIP 26, Biological and Biomedical Sciences

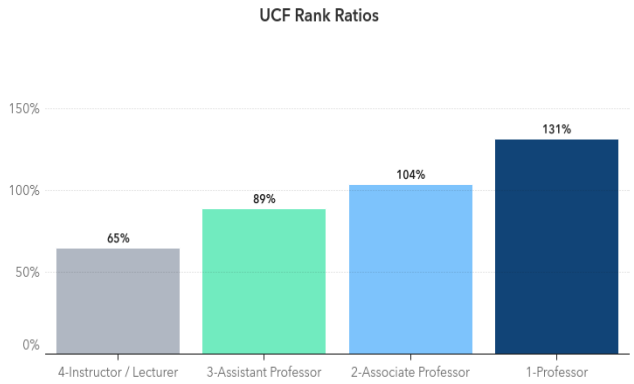


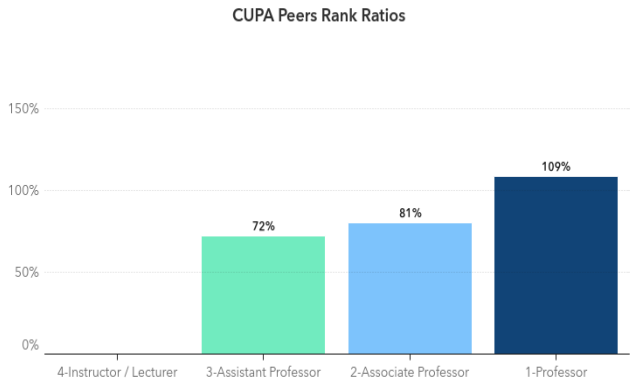


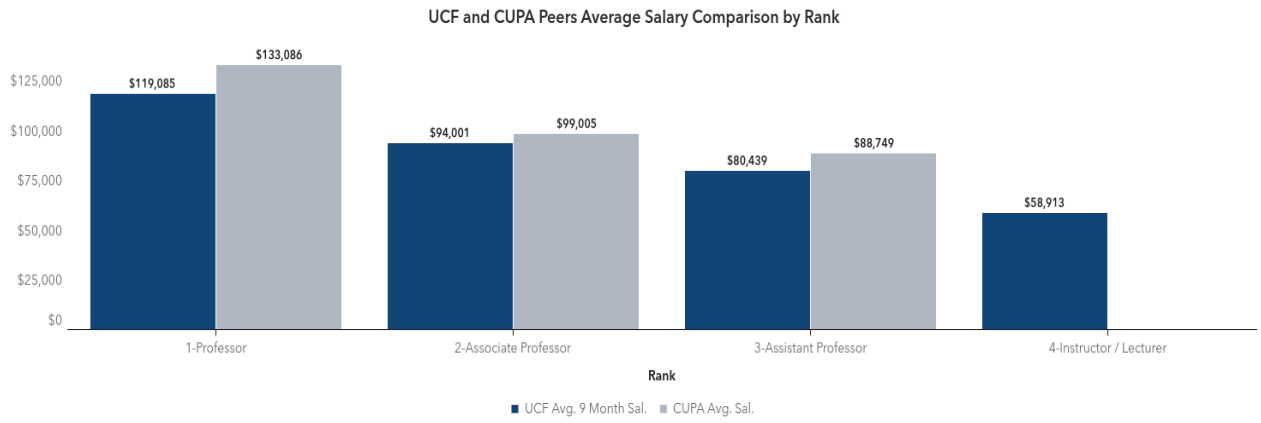


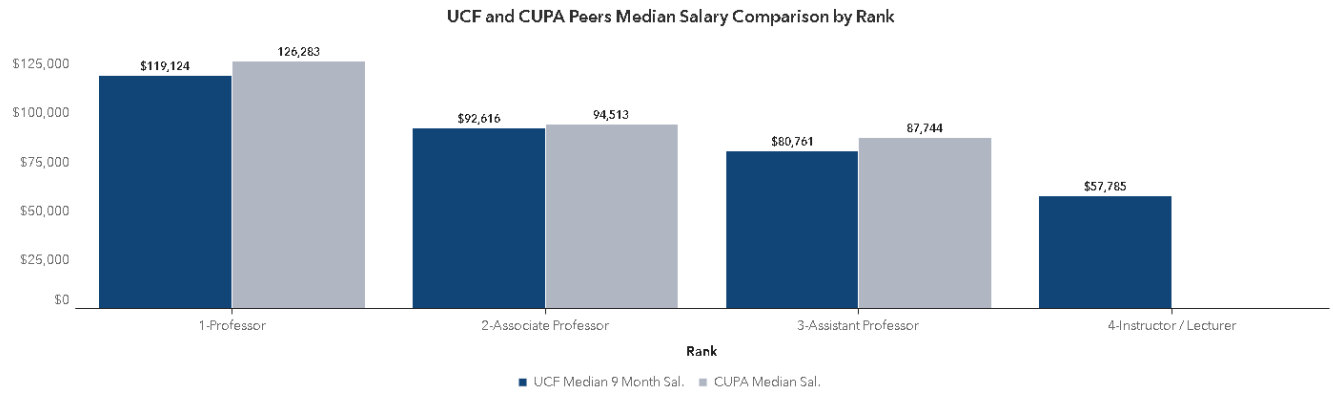


CIP 27, Mathematics and Statistics

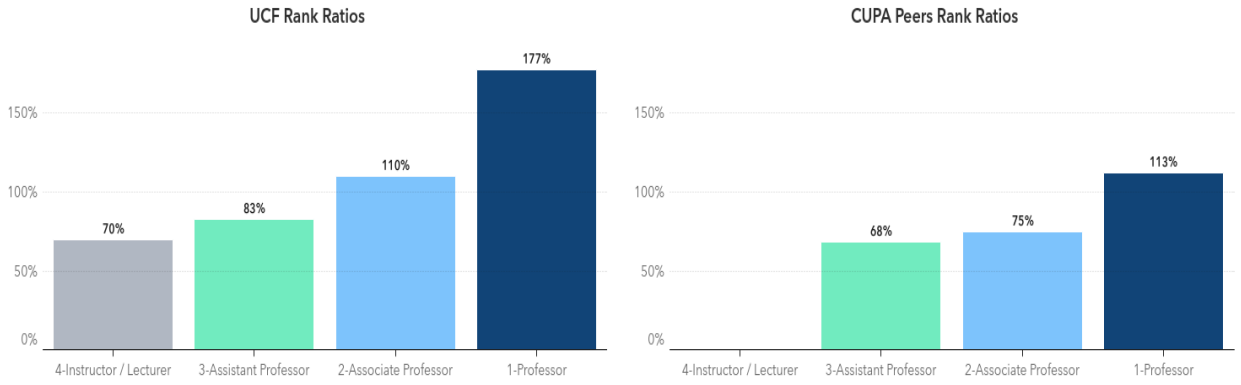


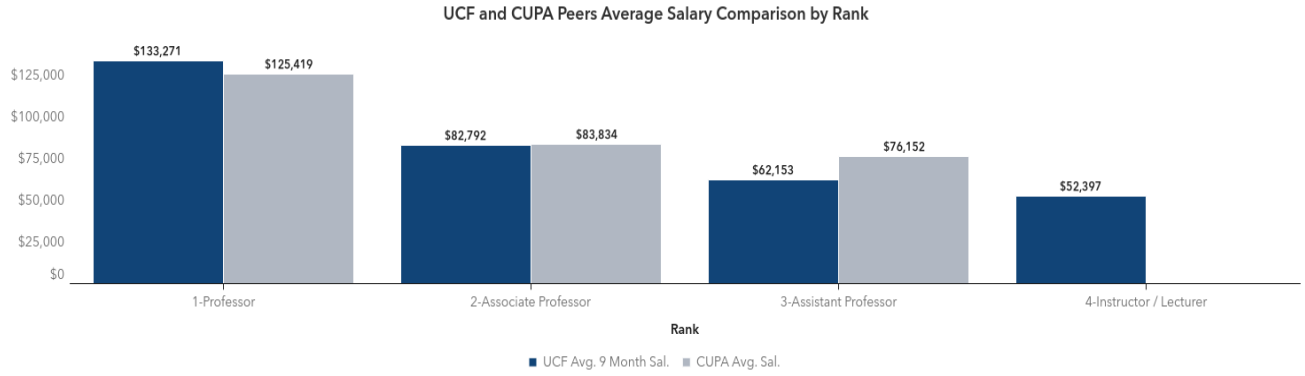


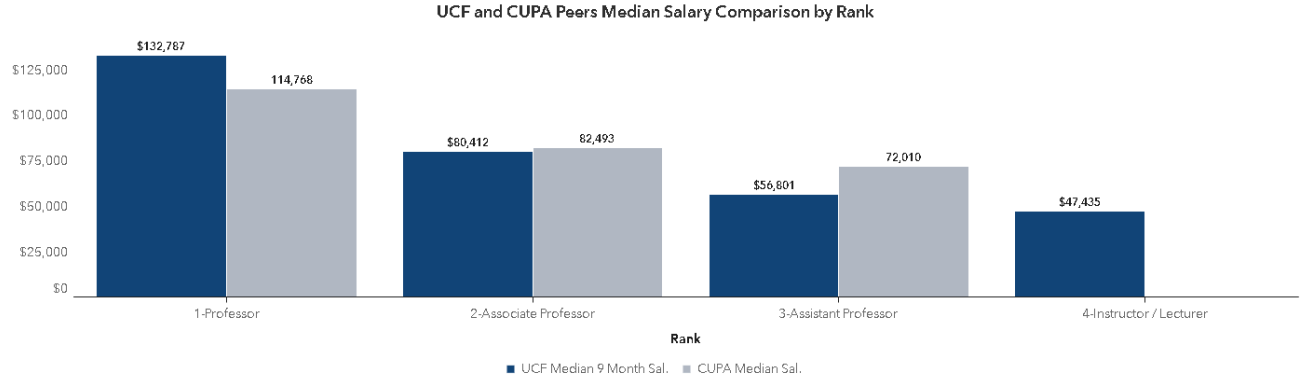




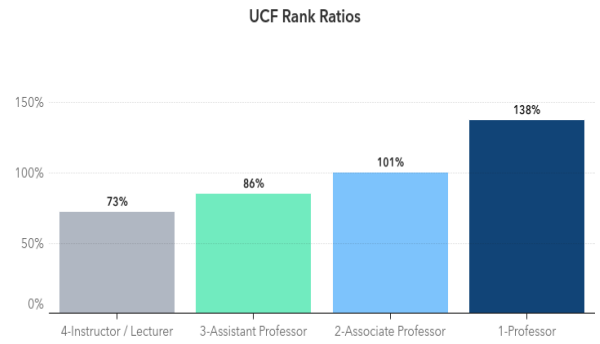
CIP 38, Philosophy and Religious Studies

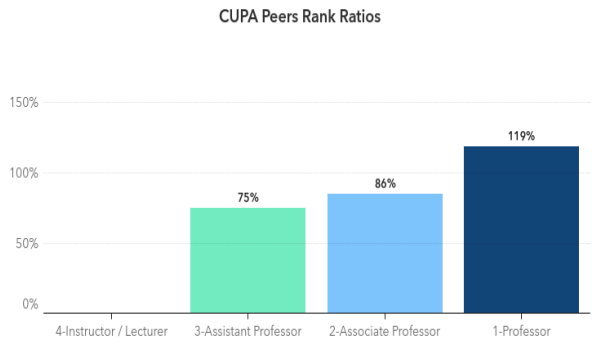


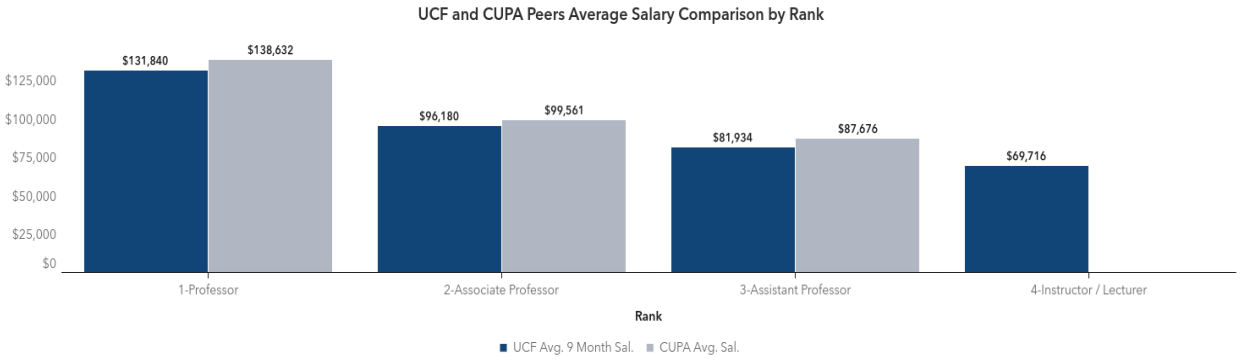


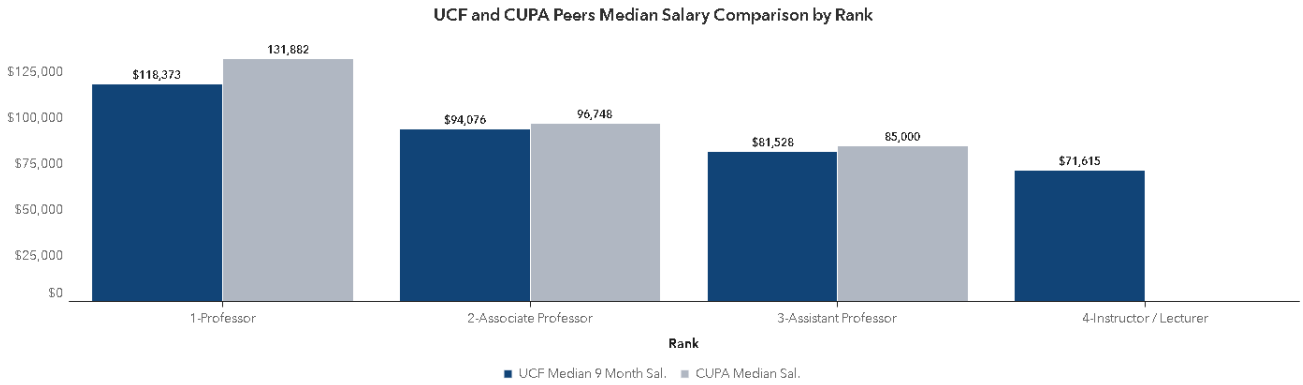


CIP 40, Physical Sciences

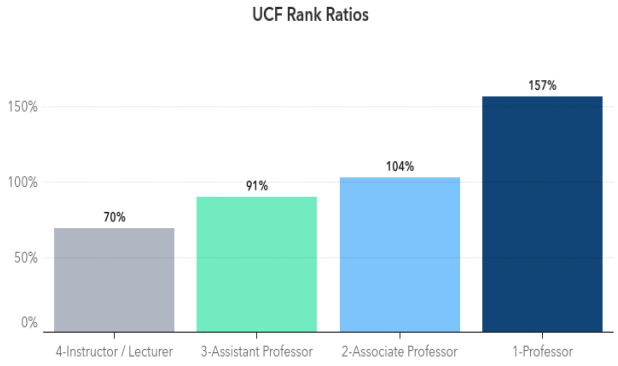


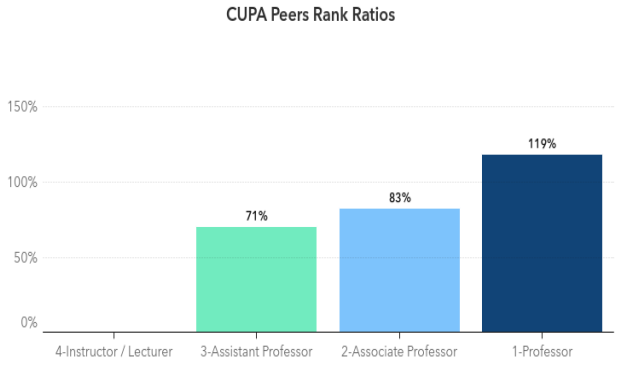


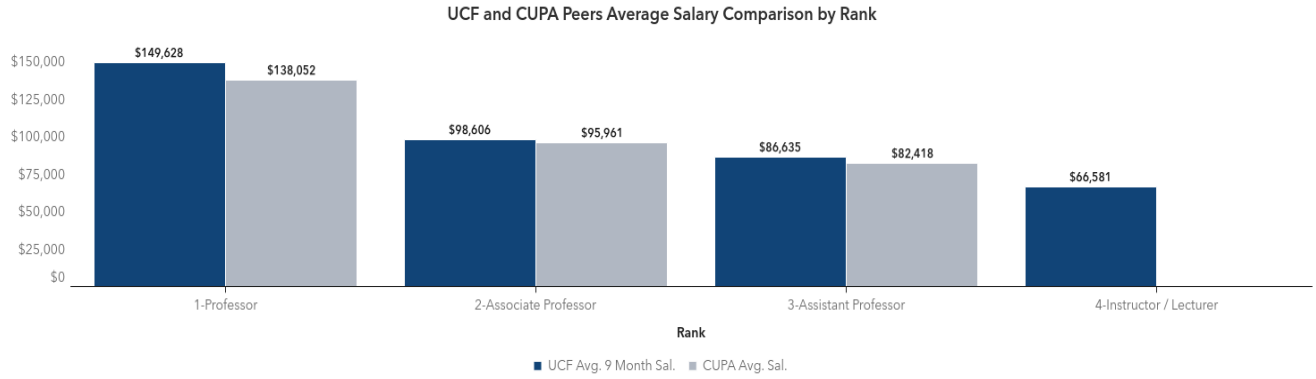


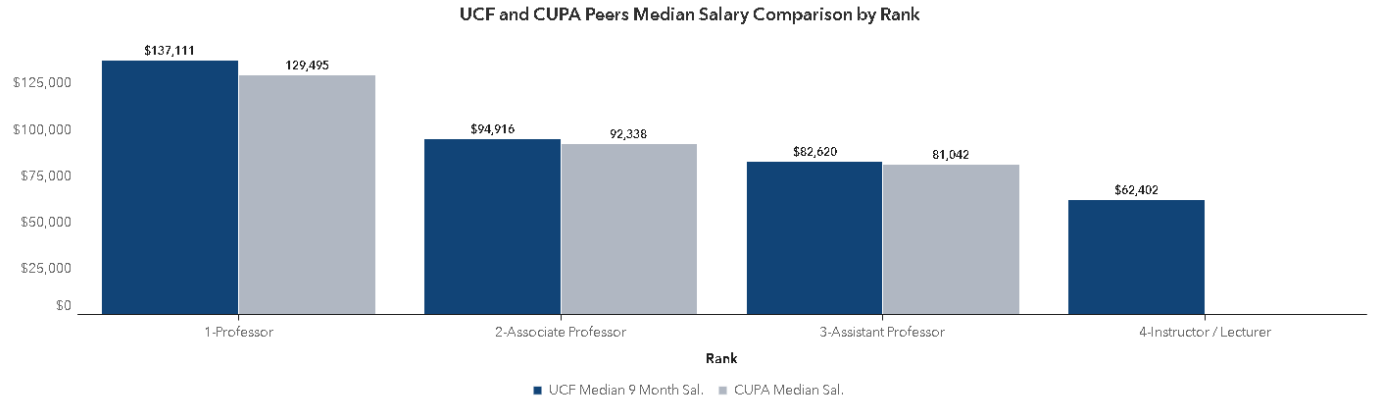


CIP 42, Psychology

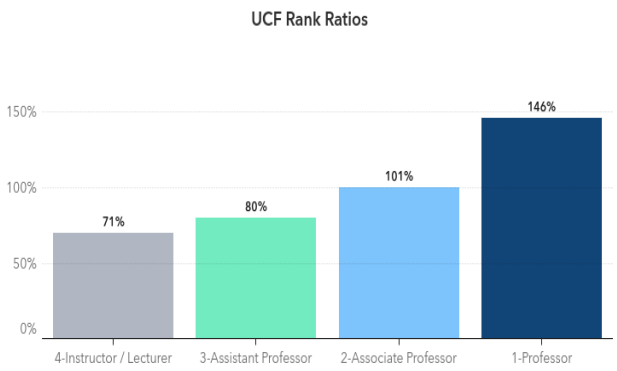


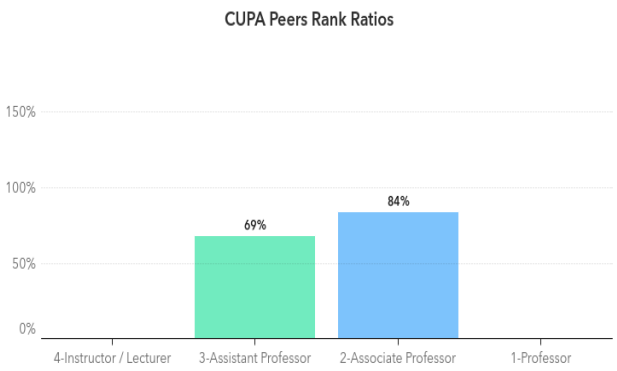


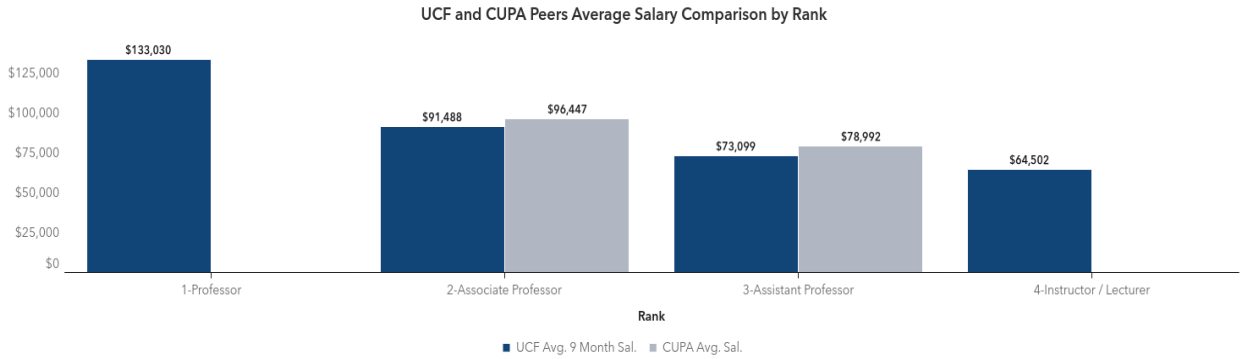


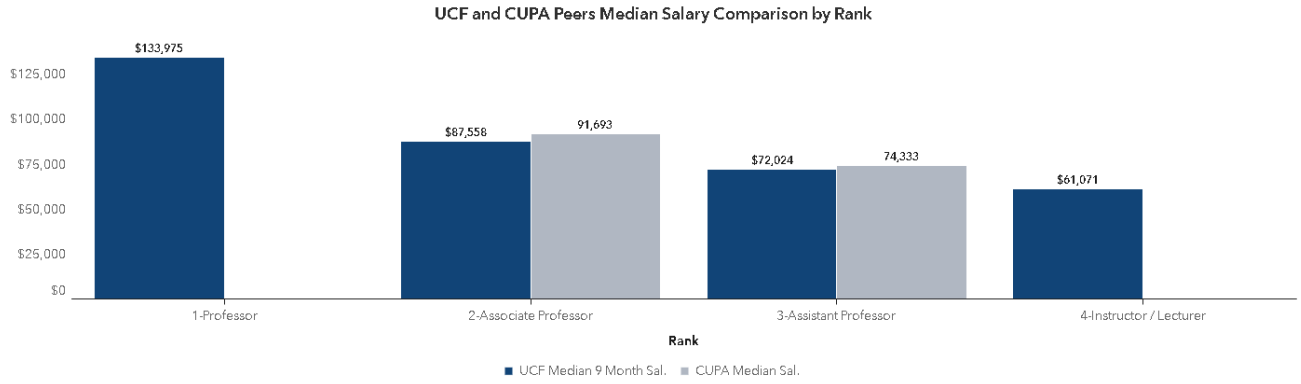


CIP 43, Homeland Security, Law Enforcement, Firefighting and Related Protective Services

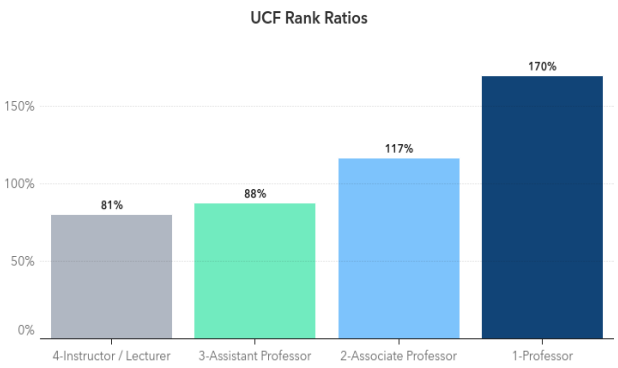


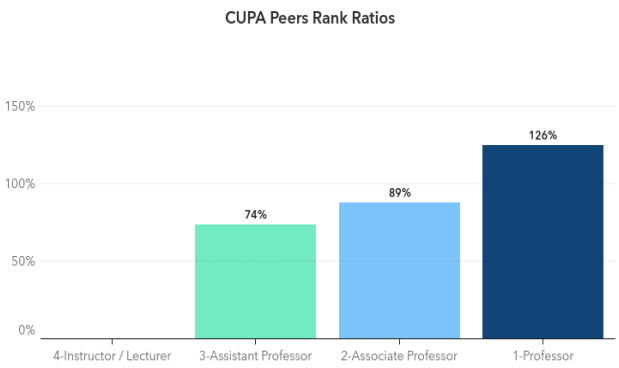


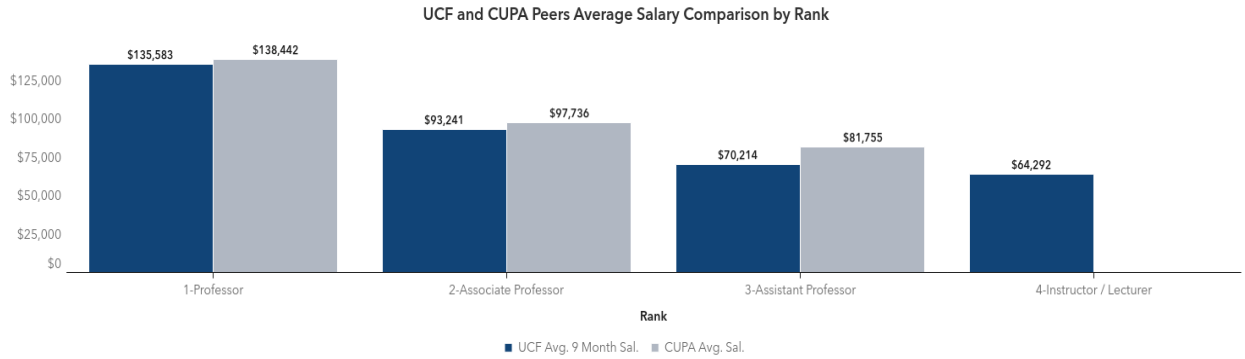


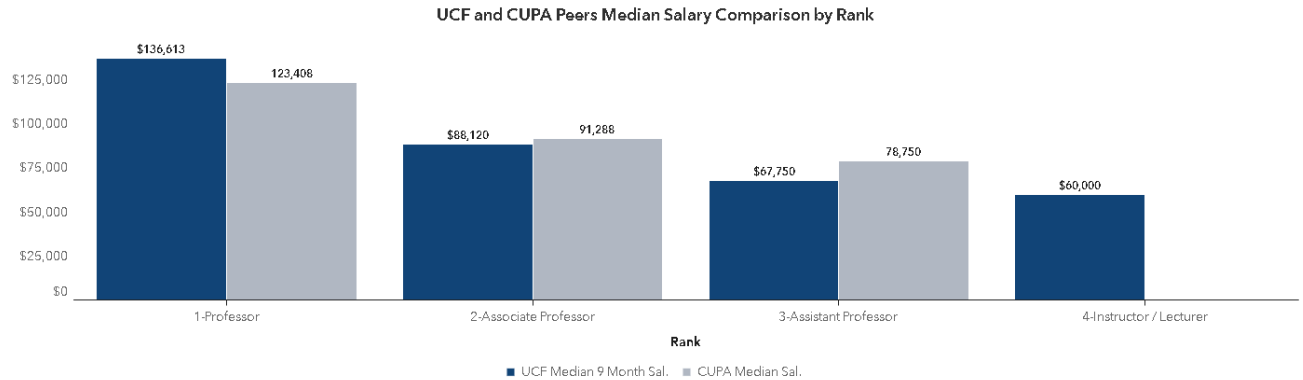


CIP 44, Public Administration and Social Service Professions

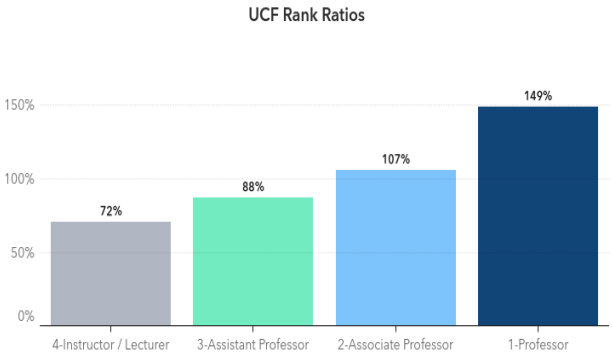


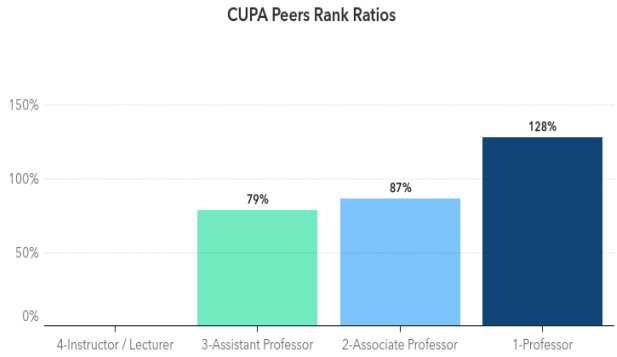


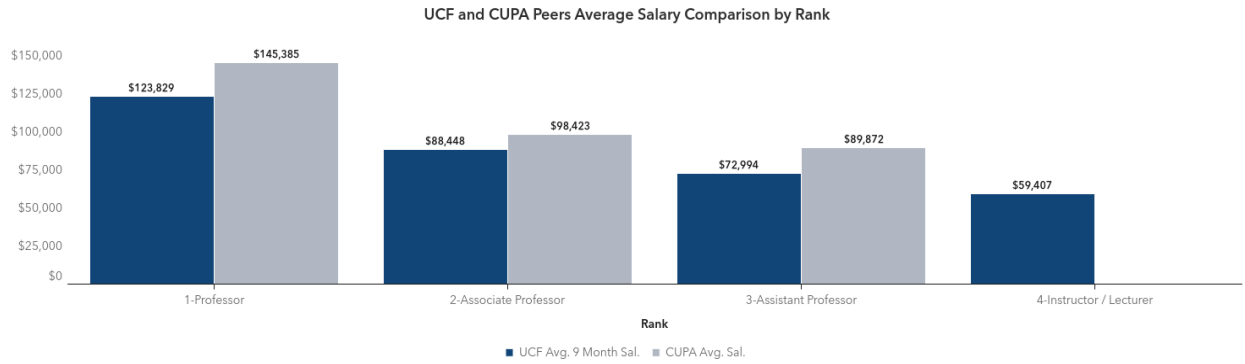


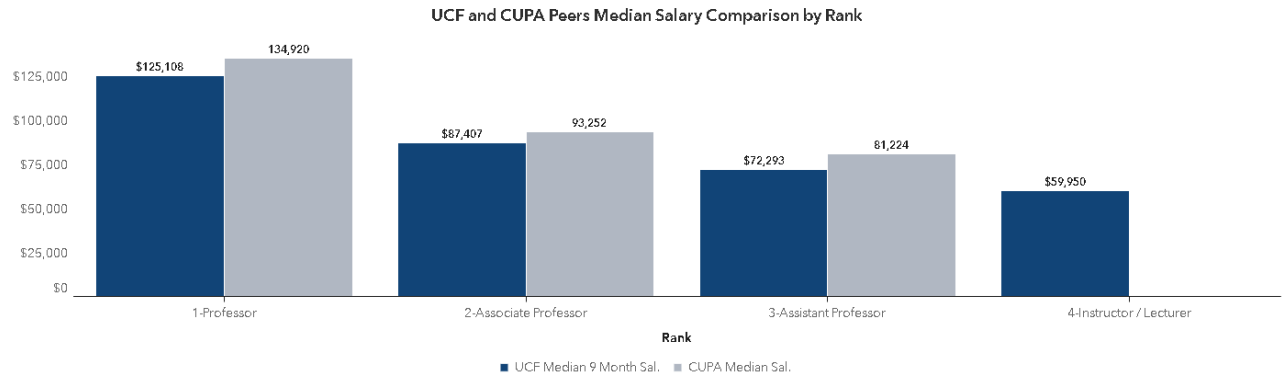


CIP 45, Social Sciences

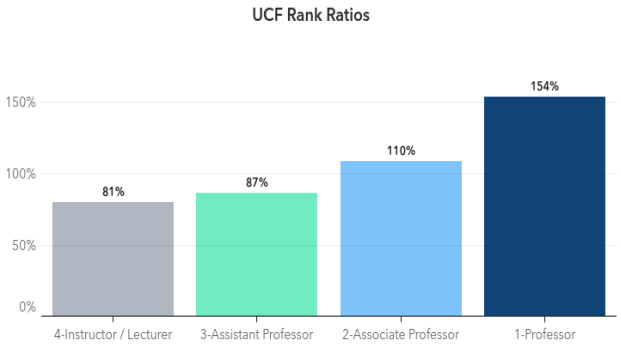


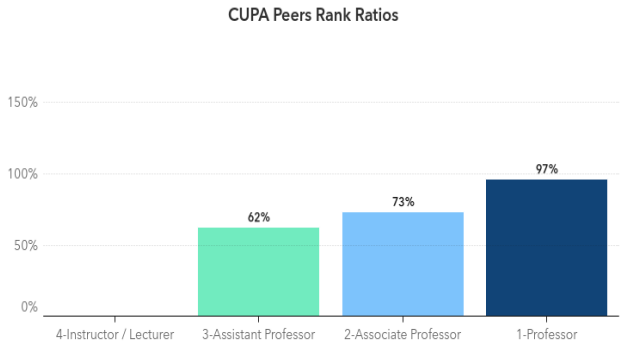


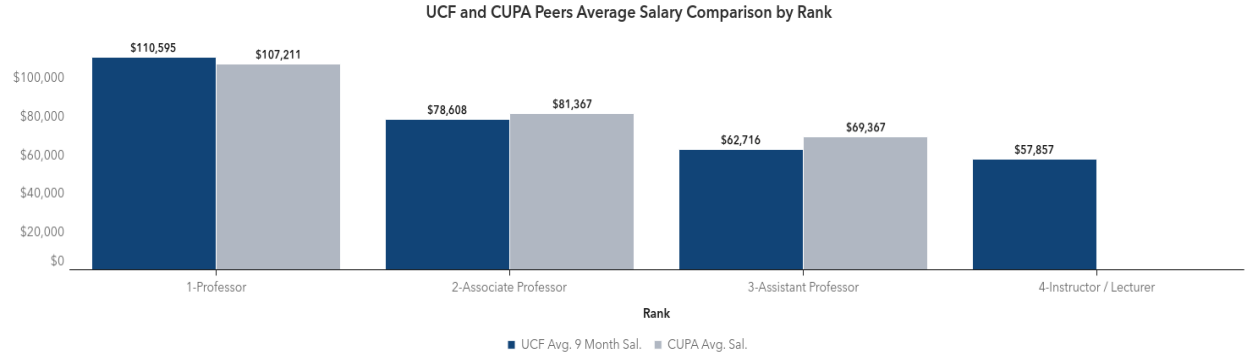


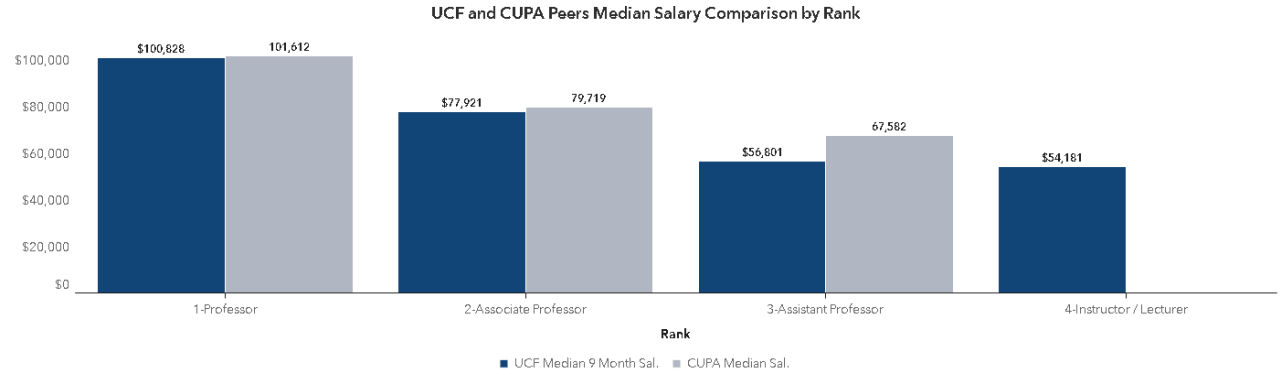


CIP 50, Visual and Performing Arts

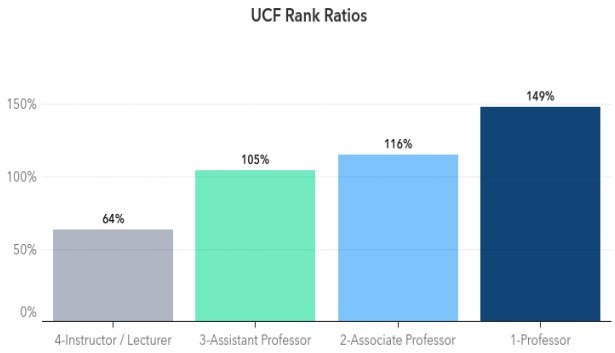


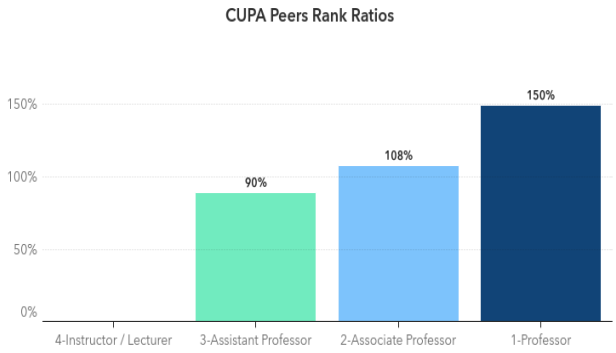


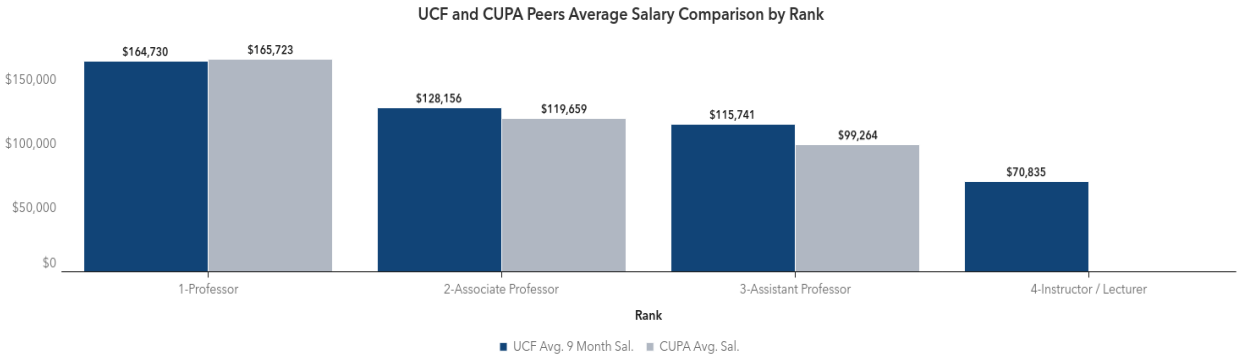


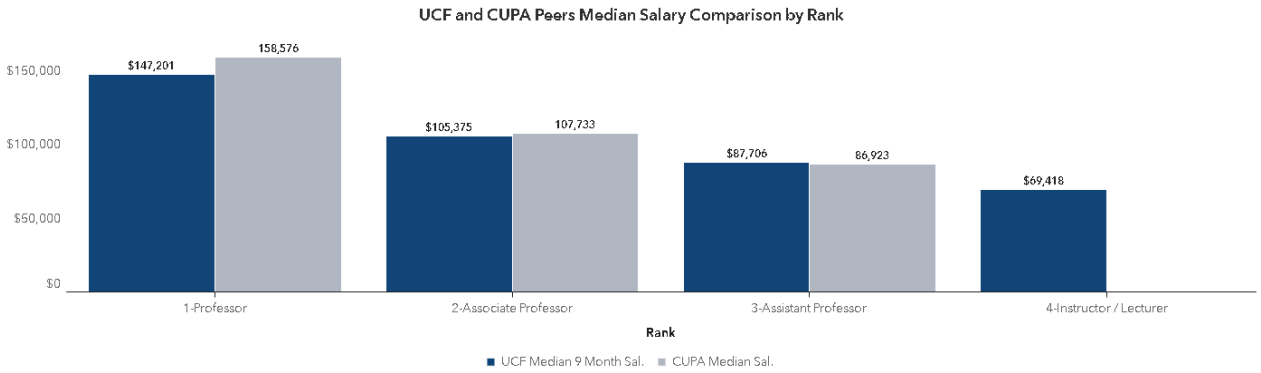


CIP 51, Health Professions and Related Programs

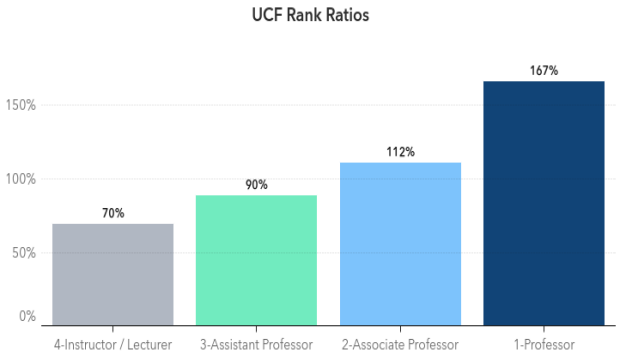


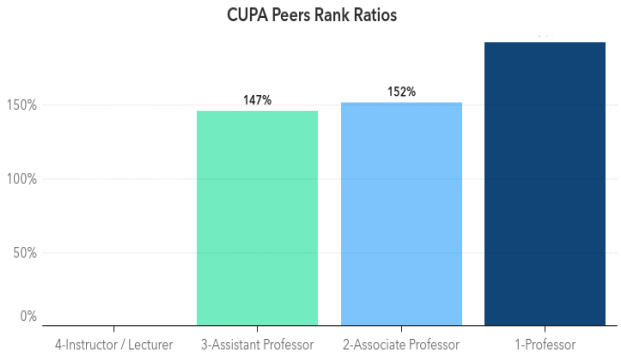


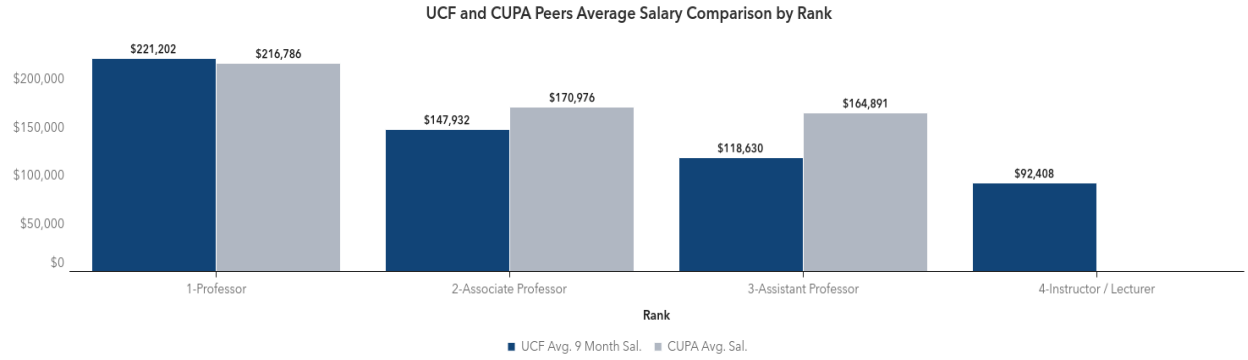


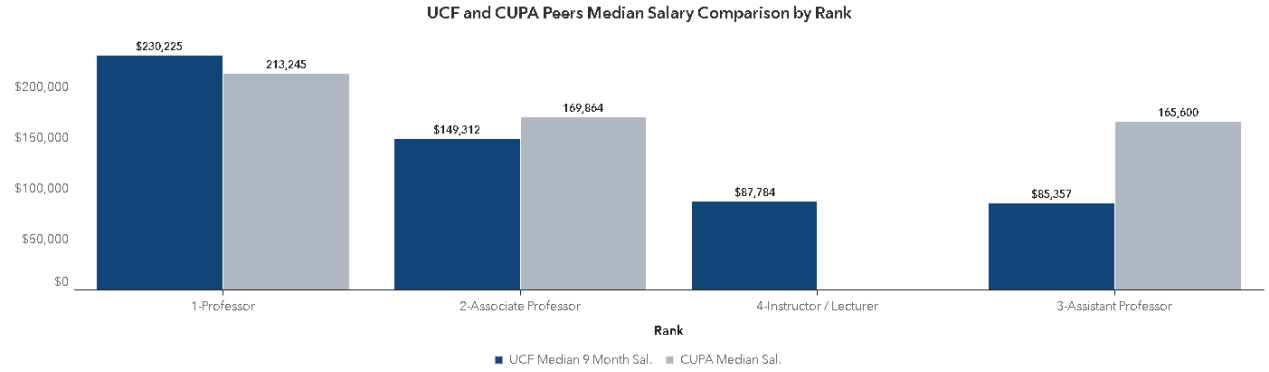


CIP 52, Business, Management, Marketing, and Related Support Services

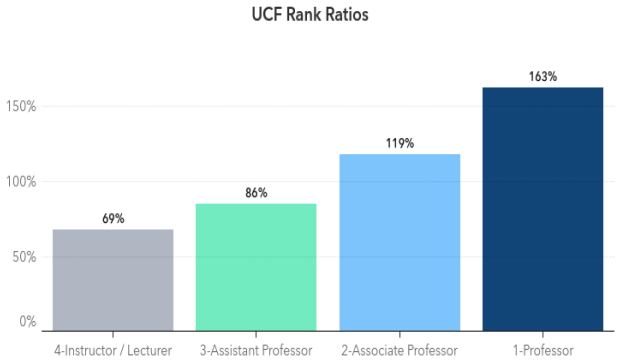


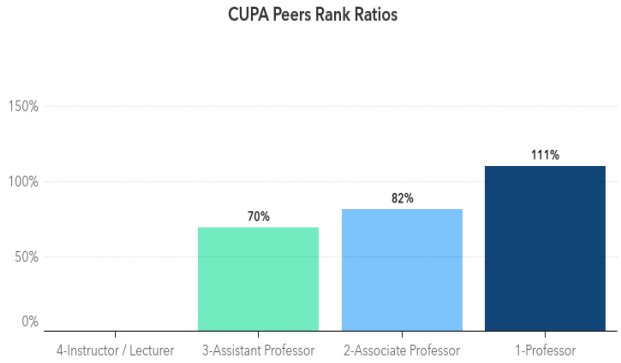


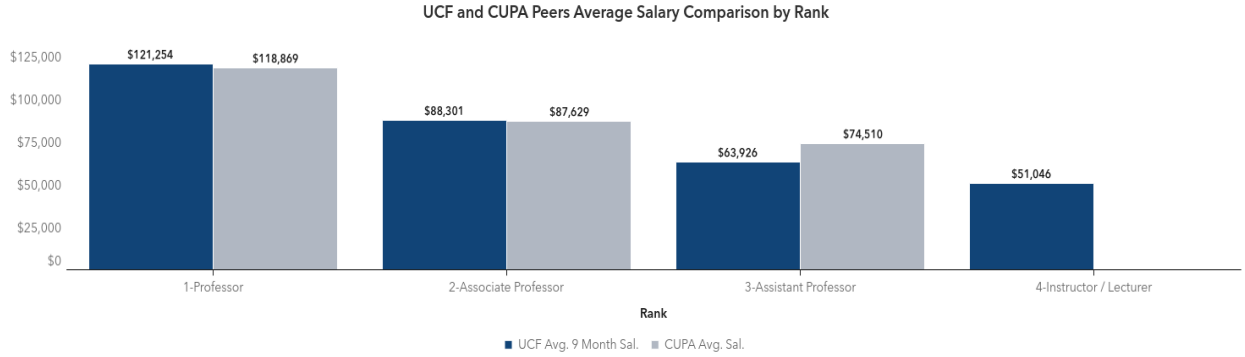


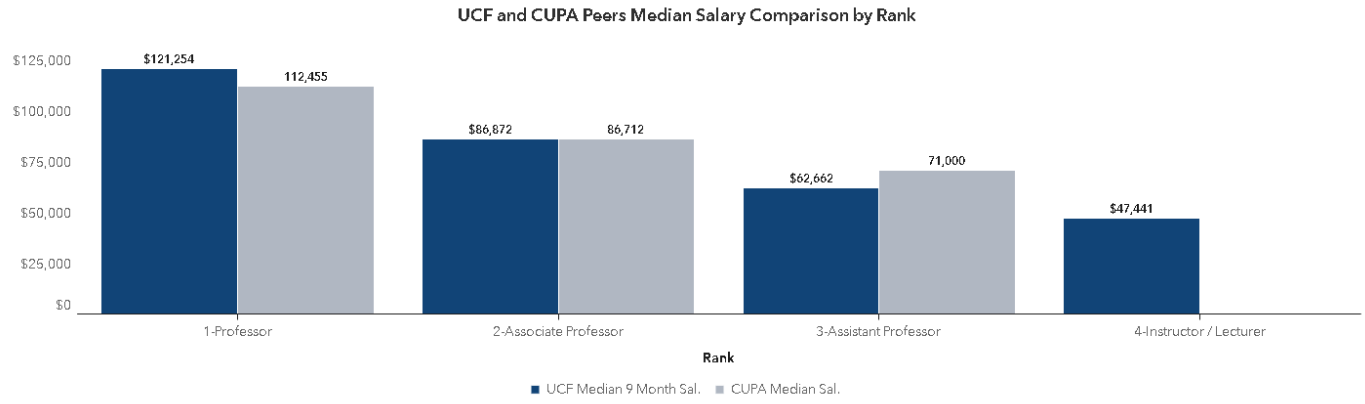


CIP, 54 History









APPENDIX B – UCF CIP CODES

Please note that UCF does not have faculty represented in all CIP's

CIP 2 Digit Code	CIP Name
03	NATURAL RESOURCES AND CONSERVATION.
04	ARCHITECTURE AND RELATED SERVICES.
05	AREA, ETHNIC, CULTURAL, GENDER, AND GROUP STUDIES.
09	COMMUNICATION, JOURNALISM, AND RELATED PROGRAMS.
11	COMPUTER AND INFORMATION SCIENCES AND SUPPORT SERVICES.
13	EDUCATION.
14	ENGINEERING.
15	ENGINEERING/ENGINEERING-RELATED TECHNOLOGIES/TECHNICIANS.
16	FOREIGN LANGUAGES, LITERATURES, AND LINGUISTICS.
19	FAMILY AND CONSUMER SCIENCES/HUMAN SCIENCES.
22	LEGAL PROFESSIONS AND STUDIES.
23	ENGLISH LANGUAGE AND LITERATURE/LETTERS.
24	LIBERAL ARTS AND SCIENCES, GENERAL STUDIES AND HUMANITIES.
25	LIBRARY SCIENCE.
26	BIOLOGICAL AND BIOMEDICAL SCIENCES.
27	MATHEMATICS AND STATISTICS.
28	MILITARY SCIENCE, LEADERSHIP AND OPERATIONAL ART.
30	MULTI/INTERDISCIPLINARY STUDIES.
31	PARKS, RECREATION, LEISURE, FITNESS, AND KINESIOLOGY.
32	BASIC SKILLS AND DEVELOPMENTAL/REMEDIAL EDUCATION.
38	PHILOSOPHY AND RELIGIOUS STUDIES.

40	PHYSICAL SCIENCES.
42	PSYCHOLOGY.
43	HOMELAND SECURITY, LAW ENFORCEMENT, FIREFIGHTING AND RELATED PROTECTIVE SERVICES.
44	PUBLIC ADMINISTRATION AND SOCIAL SERVICE PROFESSIONS.
45	SOCIAL SCIENCES.
47	MECHANIC AND REPAIR TECHNOLOGIES/TECHNICIANS.
50	VISUAL AND PERFORMING ARTS.
51	HEALTH PROFESSIONS AND RELATED PROGRAMS.
52	BUSINESS, MANAGEMENT, MARKETING, AND RELATED SUPPORT SERVICES.
54	HISTORY.
60	HEALTH PROFESSIONS RESIDENCY/FELLOWSHIP PROGRAMS.

APPENDIX D – CUPA-HR PEER INSTITUTIONS

Arizona State University (Tempe, AZ), Colorado State University (Fort Collins, CO), Florida State University (Tallahassee, FL), Georgia Institute of Technology (Atlanta, GA), Georgia State University (Atlanta, GA), Indiana University (Bloomington, IN), Iowa State University (Ames, IA), Louisiana State University and Agricultural and Mechanical College - Baton Rouge (Baton Rouge, LA), Michigan State University (East Lansing, MI), Mississippi State University (Mississippi State, MS), Montana State University (Bozeman, MT), North Carolina State University (Raleigh, NC), North Dakota State University Main Campus (Fargo, ND), Oregon State University (Corvallis, OR), Pennsylvania State University (University Park, PA), Purdue University Main Campus (West Lafayette, IN), Rutgers the State University of New Jersey New Brunswick Campus (New Brunswick, NJ), Stony Brook University (Stony Brook, NY), Texas A & M University (College Station, TX), The Ohio State University (Columbus, OH), The University of Arizona (Tucson, AZ), The University of Utah (Salt Lake City, UT), University At Buffalo, State University of New York (Buffalo, NY), University of Alabama at Birmingham (Birmingham, AL), University of Alabama in Huntsville (Huntsville, AL), University of Arkansas Main Campus (Fayetteville, AR), University of California-Berkeley (Berkeley, CA), University of California-Davis (Davis, CA), University of California-Irvine (Irvine, CA), University of California-Los Angeles (Los Angeles, CA), University of California-Riverside (Riverside, CA), University of California-San Diego (La Jolla, CA), University of California-Santa Barbara (Santa Barbara, CA), University of California-Santa Cruz (Santa Cruz, CA), University of Central Florida (Orlando, FL), University of Cincinnati Main Campus (Cincinnati, OH), University of Colorado Boulder (Boulder, CO), University of Connecticut (Storrs, CT), University of Florida (Gainesville, FL), University of Georgia (Athens, GA), University of Hawaii at Manoa (Honolulu, HI), University of Houston (Houston, TX), University of Illinois at Chicago (Chicago, IL), University of Illinois at Urbana-Champaign (Champaign, IL), University of Iowa (Iowa City, IA), University of Kansas Main Campus (Lawrence, KS), University of Kentucky (Lexington, KY), University of Louisville (Louisville, KY), University of Maryland College Park (College Park, MD), University of Massachusetts (Amherst, MA), University of Michigan-Ann Arbor (Ann Arbor, MI), University of Minnesota-Twin Cities (Minneapolis, MN), University of Missouri - Columbia (Columbia, MO), University of Nebraska - Lincoln (Lincoln, NE), University of New Mexico Main Campus (Albuquerque, NM), University of North Carolina at Chapel Hill (Chapel Hill, NC), University of Oklahoma Norman Campus (Norman, OK), University of Oregon (Eugene, OR), University of Pittsburgh (Pittsburgh, PA), University of South Carolina Columbia (Columbia, SC), University of South Florida (Tampa, FL), University of Tennessee, Knoxville (Knoxville, TN), University of Texas at Austin (Austin, TX), University of Virginia (Charlottesville, VA), University of Washington (Seattle, WA), University of Wisconsin-Madison (Madison, WI), Virginia Commonwealth University (Richmond, VA), Washington State University (Pullman, WA), Wayne State University (Detroit, MI)

APPENDIX E – FACULTY SENATE RESOLUTION 2019-2020-15

Resolution 2019-2020-15 Periodic Faculty Salary Analyses Across the University of Central Florida

Whereas, salary compression may occur when salary differential between junior and senior faculty is smaller than it should be based on external market forces; and

Whereas, salary inversion occurs when salary compression, left unexamined or unadjusted over time, results in junior faculty salaries being greater than senior faculty salaries; and

Whereas, salary inequities associated with gender/race/ethnicity may occur independent of other variables; and

Whereas, salary compression, salary inversion, and salary inequities threaten the integrity of faculty ranks, morale, and retention issues for faculty at the University of Central Florida; therefore

Be it resolved that the University of Central Florida administration in consultation with the Faculty Senate shall, on a regular basis, collect and analyze both tenure-track and non-tenure-earning faculty salary data across the system to determine the extent of 1) salary compression, 2) salary inversion, and 3) salary inequities based on gender/race/ethnicity. A five-year time interval is suggested for regular periodic studies (years ending in 0 or 5).A report will be made available to all faculty shortly after each analysis is completed, ideally within 3-4 months from completion of the report.

APPENDIX F – Additional Index Rate Analyse

This data only includes faculty who were at UCF in 2014. Please note that faculty could have changed rank from Assistant to Associate, or Associate to Full, although 60 Assistant Professors remained in rank at the end of 2019. Assistant Professors were likely to come up for promotion during the 2020 cycle.

UCF Faculty Salary Increase Comparison to Employment Cost Index for Education (2014-2019) by Rank

ECIC Index Change for Period: +12.5%

	Above		Below		Total N
Ranks	N	%	N	%	
1-Professor	175	25.89%	59	29.65%	234
2-Associate Professor	244	36.09%	62	31.16%	306
3-Assistant Professor	40	5.92%	20	10.05%	60
4-Instructor / Lecturer	217	32.10%	58	29.15%	275
Grand Total	**676**	**100.00%**	**199**	**100.00%**	**875**

Table 1

UCF Faculty Salary Increase Comparison to Consumer Price Index for Urban Areas (CPI-U) (2014-2019) by Rank

CPI-U Index Change for Period: +7.6%

	Above		Below		Total N
Ranks	N	%	N	%	
1-Professor	225	26.32%	9	45.00%	234
2-Associate Professor	301	35.20%	5	25.00%	306
3-Assistant Professor	59	6.90%	1	5.00%	60
4-Instructor / Lecturer	270	31.58%	5	25.00%	275
Grand Total	**855**	**100.00%**	**20**	**100.00%**	**875**

Table 2

UCF Faculty Salary Increase Comparison to CUPA Peers Increases (2014-2019) by Rank – (based on average CUPA salaries)

CUPA Index Changes: Professor – +11.2%, Associate Professors - +14.5%, Assistant Professors - +17%
*****note CUPA did not provide data on Instructor/Lecturer levels.***

	Above		Below		Total N
Ranks	N	%	N	%	
1-Professor	206	28.41%	28	18.67%	234
2-Associate Professor	216	29.79%	90	60.00%	306
3-Assistant Professor	28	3.86%	32	21.33%	60
4-Instructor / Lecturer	275	37.93%		0.00%	275
Grand Total	**725**	**100.00%**	**150**	**100.00%**	**875**

Table 3

UCF Faculty Salary Increase Comparison to CUPA Peers Increases (2014-2019) by Rank – (based on median CUPA salaries)

CUPA Index Changes: Professor – +6.5%, Associate Professors - +4.1%, Assistant Professors - +7.6% **note CUPA did not provide data on Instructor/Lecturer levels.

	Above		Below		Total N
Ranks	N	%	N	%	
1-Professor	230	26.59%	4	40.00%	234
2-Associate Professor	301	34.80%	5	50.00%	306
3-Assistant Professor	59	6.82%	1	10.00%	60
4-Instructor / Lecturer	275	31.79%		0.00%	275
Grand Total	**865**	**100.00%**	**10**	**100.00%**	**875**

Table 4

APPENDIX G – UCF FACULTY INCREASES (2015 – 2019)

2014-15

- 3% UCF across-the-board for in-unit faculty and in-unit A&P, effective 08/08/14.
- 2% UCF merit based pool for in-unit faculty and in-unit A&P, effective 08/08/14.
- 3% UCF across-the-board for non-unit faculty, non-unit A&P and non-unit USPS, effective 08/08/14.
- 2% UCF merit pool for non-unit faculty, non-unit A&P and non-unit USPS, effective 08/08/14 (retroactive from 09/12/14).

2015-16

- 1% UCF across-the-board for in-unit faculty, effective 01/15/16.
- One-time payment of $1,375, effective 01/15/16.
- 2% merit pool for in-unit faculty, effective 1/15/16.
- 2% UCF across-the-board for non-unit faculty, effective 01/15/16
- 1% UCF merit pool for non-unit faculty, effective 1/15/16.
- One-time payment of $800 for all non-unit employees, effective 1/15/16.

2016-17

- 1% UCF across-the-board for in-unit faculty effective 12/16/16.
- One-time payment of $970, effective 12/16/16.
- 1.5% merit pool for in-unit faculty, effective 12/16/16.
- "Equity Increases. Effective December 16, 2016 for the 2016-2017 year, the University shall provide an amount equal to one-fifth of one percent (0.20%) of the total base salary of all E&G employee as of August 12, 2016 to all regular, clinical, research, non-visiting employees whose August 12, 2016, 1.0FTE base salary was less than $45,000 for those with a Ph.D. or equivalent terminal degree, or less than $42,000 for all other or whose 12-month salary was less than $60,000 for those with a Ph.D. or equivalent degree or less than $56,000 for all others. Equity increases shall be distributed proportionately to the difference between the employee's August 12, 2016 salary and the thresholds above." *UCF BOT-UFF Collective Bargaining Agreement [2015-18], 2016-2017 Supplement, Article 23.4(d).*
- 1% UCF across-the-board salary increase for non-unit faculty, effective 09/23/16.
- 1.5% discretionary merit pool for non-unit faculty effective 09/23/16.

2017-18

- 2.25% across-the-board salary increase for non-unit faculty effective 09/29/17.
- 2.25% across-the-board salary increase for in-unit faculty effective 03/23/18.
- One-time payment of $1,500, effective 03/16/18 for in-unit faculty.

- In-Unit Faculty "Equity Increases. Effective March 23, 2018, for the 2017-18 year, the University shall provide a one-time equity salary increase to all regular, clinical, research and non-visiting E&G funded employees as follows. Equity increases shall be distributed equal to the difference between the employee's August 11, 2017 salary and the thresholds below. The increase shall be available to employees who were in an employment relationship (not OPS) with the University prior to May 7, 2017; who remain in an in-unit employment relationship at the date of implementation, and whose August 11, 2017 1.0FTE base salary also meets on of the following qualifications:
    - 9-month salary:
        - Is less than $45,000 and who holds a Ph.D. or equivalent terminal degree in a field related to the employee's assignment.
        - Is less than $42,000 for all other employees.
    - 12-month salary:
        - Is less than $60,000 and who holds a Ph.D. or equivalent terminal degree in a field related to the employee's assignment.
        - Is less than $56,000 for all other employees."

  UCF BOT-UFF Collective Bargaining Agreement, Article 23 [2017-2018]

2018-19

- 2% across-the-board salary increase for non-unit faculty, effective 09/7/18.
- 2% across-the-board salary increase for in-unit faculty effective 08/23/19.
- One-time payment of $2,250, effective 05/10/19 for in-unit faculty.

2019-20

- 1.25% across-the-board salary increase for in-unit faculty effective 09/20/19.

APPENDIX H – WORKING GROUP MEMBERSHIP

The following are members of the Faculty Salary Equity Study working group:

Edwin Torres Areizaga
Associate Professor, Rosen School of Hospitality Management

Mason Cash
Associate Professor, College of Arts & Humanities

Thomas Cox
Associate Professor, College of Community Innovation and Education

Debbie Hahs-Vaughn
Professor, College of Education & Human Performance

Jana Jasinski
Pegasus Professor of Sociology
Vice Provost for Faculty Excellence

Sara Lovel
Assistant Director, Human Resources - Classification & Compensation

Hansen Mansy
Associate Professor, College of Engineering and Computer Science

Amanda Miller
IR Manager, Institutional Knowledge Management

Nancy Myers
Director, Office of Institutional Equity

Michael Proctor
Associate Professor, College of Engineering and Computer Science

Alfonse Shulte
Professor, College of Sciences

Linda Sullivan
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