Office of Internal Audit

May 4, 2016

Strategic Internal Audit Plan

UNIVERSITY OF
Cincinnati

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I. Executive Summary

Overview

The University of Cincinnati's **Third Century** sharpens the vision set forth in ***UC2019/*Academic Master Plan.** Third Century prioritizes five items: 1) Investing in Faculty and Staff; 2) Leveraging Research; 3) Reimagining the Student Experience; 4) Excellence in E-Learning; 5) Building the Resource Base. Embedded within these areas are cross-cutting themes such as diversity, international, mission-based health care, staff development and information technology. Our internal audit plan was developed using a risk assessment process that was driven by our understanding the university's strategic priorities. We have developed a five year plan to provide a context of what we believe we can effectively audit in a five year period, but we update our risk assessment and our plan every year. In general, we believe that within this five year plan, we will accomplish the following:

- Audit 100% of the areas that we consider to be high risk;
- Audit 59% of the areas that we consider to be medium risk;
- Audit 36% of the areas that we consider to be low risk.

Additionally, this plan includes goals for our department that challenge us to improve our processes and develop our people to achieve the type of value added internal audit department that the university expects.

Mission of Internal Audit

Internal audit is an independent and objective resource of the university, providing assurance and consulting services designed to assist the university in achieving its goals by evaluating units, financial and operational processes, internal controls, contracts, grants, information technology, etc. and offering recommendations to improve the effectiveness of financial accounting and reporting, information technology (IT), internal control, and operational and compliance related activities.

Third Century Priority - Investing in Faculty and Staff

In later years the audit plan includes audits of the university's compensation and benefits programs. Additionally, the university must have resources in order to invest in faculty and staff. As mentioned under 'building the resource base', all of our audits are focused on streamlining processes, internal controls and inefficient or wasteful spending.

Reimagining the Student Experience

Our audit plan includes audits of business processes and financial transactions in academic units (we strive to audit the colleges over a five year rotational period) and

some critical academic and student services processes, such as student advising and academic progress, student financial aid and scholarships.

Leveraging Research

A critical part of the university's operations and a key priority is leveraging research. Research is highly regulated, resulting in complex programs and controls, as well as compliance risk. Our strategic plan includes auditing compliance and controls over grants throughout the institution. We believe this is critical to address the compliance risks associated with the research area. Additionally, at the request of the UC Research Institute (UCRI) to fulfill its agreement with the university, we audited UCRI in FY 2014 and plan to continue these audits in the future, unless UCRI hires an external auditing firm to audit its financial statements (UCRI hired an external audit firm in FY 2015, but has requested UC internal audit to perform the audit in FY 2016).

Excellence in E-Learning

Our audit plan includes an E-Learning IT audit project in FY 2018. Additionally, our audit plan includes various central IT projects and many of our other audit projects are integrated financial/compliance/operational/IT audits. For example, our IT auditor reviews Information Technology General Controls during all of our college audits. We may also integrate IT audit work into other audits, depending on the audit being performed. Internal Audit and Information Security partnered to hire a third party to review technical aspects of the new Student Information System implementation. This review is in process.

Building the Resource Base

In order to achieve its goals, UC must exercise responsibility by maintaining strong fiscal stewardship and achieving financial stability. The objectives of many of our audits include the identification of improvements to internal controls and inappropriate expenditures. We have included an estimate of time in our audit plan for semi-annual continuous audit work on disbursements. The objective of this work is to perform queries on electronic disbursement data to attempt to identify unusual, duplicate or noncompliant disbursements. We believe this is a cost effective way to audit a large amount of disbursements with limited resources in a timely manner.

Internal Audit Strategic Goals

Internal audit has identified five key strategic goals that will create a foundation for continued success and alignment with university objectives, even as the operations and people change. As we continue to improve our operations, we need to focus on achieving specific goals, discussed later in this plan. Our long-term strategic goals are:

1 Build and maintain a quality, diverse audit team that provides opportunities for development and advancement of personnel, including our student co-ops.

2 Cross train personnel to prevent a knowledge gap if/when personnel leave the department.

3 Improve our network throughout the university so that our department is integrated with other university departments and functions.

4 Use technology to more effectively and efficiently perform our work.
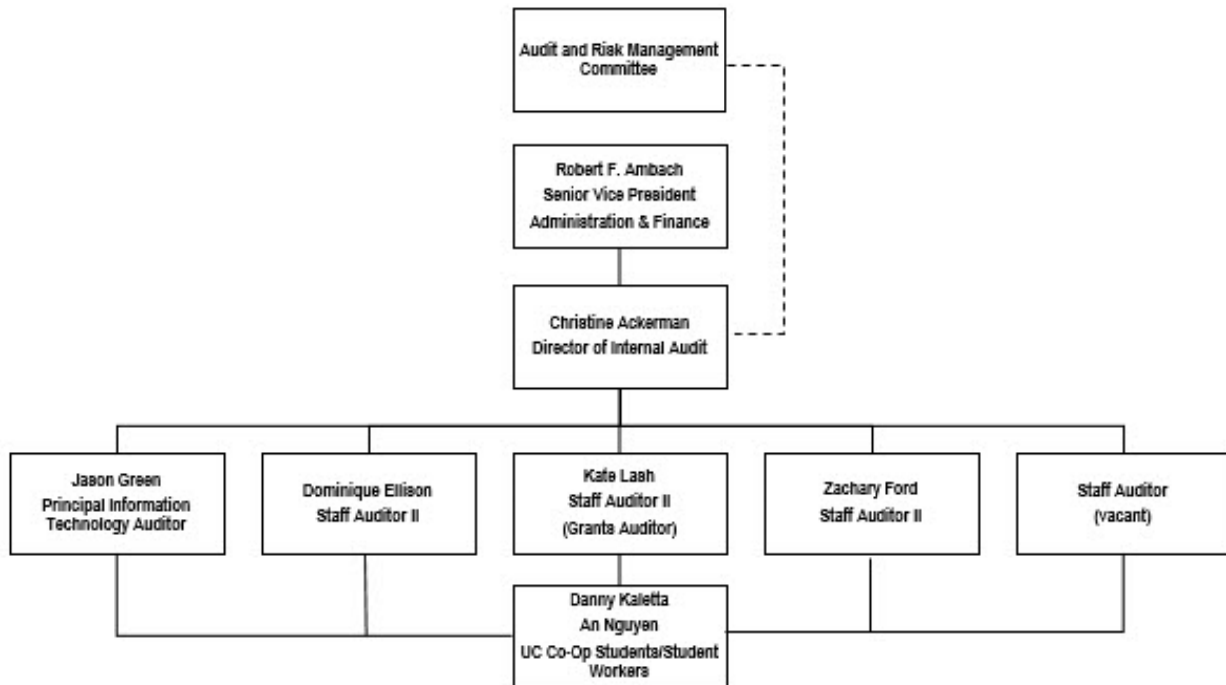
5 Have a successful Quality Assurance Review in FY 2017.

II. Office of Internal Audit Staffing and Status of 2016-17 Audit Activities

Staffing

The Office of Internal Audit is comprised of six permanent positions, the Director and five staff. We also hire UC students as co-op students. The current staffing model is shown below.

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                    │ Audit and Risk Management│- - - ┐
                    │       Committee          │      │
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                    │    Robert F. Ambach      │      │
                    │  Senior Vice President   │      │
                    │ Administration & Finance │      │
                    └─────────────────────────┘      │
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                    ┌─────────────────────────┐      │
                    │    Christine Ackerman    │- - - ┘
                    │ Director of Internal Audit│
                    └─────────────────────────┘
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| Jason Green
Principal Information Technology Auditor | Dominique Ellison
Staff Auditor II | Kate Lash
Staff Auditor II
(Grants Auditor) | Zachary Ford
Staff Auditor II | Staff Auditor
(vacant) |

Danny Kaletta
An Nguyen
UC Co-Op Students/Student Workers

Christine Ackerman has been the Associate Vice President and Director of Internal Audit since July 2007. Prior to joining UC she spent 17 years working for Deloitte & Touche LLP in Cincinnati in their audit and assurance practice. She is a Certified Public Accountant and earned a Bachelors of Science degree in accounting from Miami University (1990) and her Masters of Business Administration from the University of Cincinnati (2014).

Jason Green has been in the UC internal audit department since October 2012. Prior to joining UC he was a senior internal auditor for Union Savings Bank (7 years) and an internal auditor for Mead Corporation (2 years). Jason earned a Bachelors of Science in Finance from Miami University (2000) and from Fall 2014 through Fall 2015 Jason took specific information technology courses in UC's School of Information Technology in the College of Education, Criminal Justice and Human Services in order to develop into the Principle IT Auditor. Jason is a Certified Information Systems Auditor (CISA), which one obtains by passing the CISA exam.

Dominique Ellison has been in the UC internal audit department since October 2013. Prior to joining UC she was an internal auditor for Macy's (2 years) and an auditor for Grant Thorton, LLP (1.5 years). She has a Bachelors of Science degree in education from Ohio University and a Masters of Business Administration and Masters of Science in Accounting from Northeastern University. Dominique is working towards becoming a certified fraud examiner (CFE) and is expected to complete this by June 2016.

Kate Lash has been in the UC internal audit department since December 2014. Prior to that she spent approximately a year working as an accountant for the UC College of Medicine business office and 2 years working as a senior auditor for Clark, Schaefer and Hackett. Kate has a Bachelors of Science in Accounting and Finance and a Masters in Accounting from Wright State University. She is a Certified Public Accountant. Kate's area of specialty is auditing grant financial compliance.

Zachary Ford has been in the UC internal audit department since November 2014. Prior to that he spent approximately 2.5 years in Macy's internal audit department. He has a Bachelors of Science in Business Administration from Northern Kentucky University and is working towards his Masters of Business Administration from UC as well as becoming a Certified Internal Auditor (CIA). We expect Zach to complete the CIA during FY 2017.

Danny Kaletta is a fourth year student in UC's Lindner College of Business earning his Bachelors of Business Administration, majoring in accounting. He has served two terms with UC internal audit as a co-op student and one term as a part time student worker. He has also spent a term interning with Deloitte & Touche in Cincinnati and has accepted a full time position with Deloitte upon his graduation in April 2017. Until Danny's graduation in April 2017 he will work as a part time student worker in our office.

An Nguyen is a third year student in the UC Lindner College of Business earning her Bachelor of Business Administration, majoring in business economics and accounting and minoring in insurance and risk management. She has served 1 term as a co-op student with UC internal audit and will return in Fall 2016.

Staff Bios

Staffing Plan

One of our top priorities is to build and maintain a quality audit team. We measure this by the quality of the work performed, the training that our staff receive each year and the number of people in our office who have relevant, professional certifications. Three people in our office have professional certifications and the rest are pursuing their certifications. We have structured our office such that a minimum requirement for promotion to senior auditor is to have a relevant, professional certification. One of our stategic initiatives is to cross train our staff to prevent significant knowledge loss if/when personnel leave our department. In fiscal 2017 Jason will develop a general IT internal controls audit program and will train the staff on how to perform basic IT general controls audits and Kate will train the rest of the staff on grant audit work.

O***ffice of Internal Audit Budget Status***

With over 94% of our Office's expenses devoted to salary costs and another 3% devoted to noncontrollable expenditures, such as the university's Anonymous Reporting Hotline, central computing costs, etc., we aggressively manage all discretionary aspects of our budget. We believe university administration is doing its best to support internal audit and we are comfortable with the current size of the office. It should be the decision of UC management to determine the amount of audit coverage that they are comfortable with. Ultimately, the size of an internal audit department is a risk vs. cost based decision.

Status of 2015-16 Audit Plan Activities

2015-2016 Audit Projects Status

Based on a risk assessment that was performed last year, an audit plan was developed and was reviewed with the Audit and Risk Management Committee in May 2015. The audit plan included a detailed list of anticipated audit activities to be performed during fiscal year 2015-16 as well as strategic goals for internal audit. The schedule below provides a status update of our 2015-16 audit plan. Most projects not completed in 2016 are included in the 2017 audit plan. In summary, we did not accomplish all of the activities planned, due primarily to a staff auditor vacancy during all FY 2016.

Audit type	Audit Status - as of April 22, 2016				
	# Completed	# In Reporting Stage	# In progress	Total	# Planned
College Audits	1		1	2	2
Athletics Audits/Projects	2		1	3	5
Campus Services			2	2	3
Other Departmental or Affiliated Entity Audits	2		1	3	4
Finance and Administration Process Audits			3	3	4
Grant Audits	2	1		3	6
Information Technology	1		3	4	4
Follow Up Audits	54			54	54
Continuous audit reviews	1	1		2	2
Investigations/special requests	2		1	3	
Total	65	2	12	79	84

Strategic Initiatives Progress

Strategic Goal #1 – Build and maintain a quality audit team:

- In addition to completing his IT development plan, Jason Green passed the Certified Information Systems Auditor (CISA) exam and is now a certified CISA.
- All other staff completed at least 40 hours of certified professional education training, including:
    - All staff attended the Association of College and University Auditor (ACUA) annual conference;
    - Zachary Ford attended a NCAA division I regional rule seminar;
    - Kate Lash attended a government cost compliance conference
- Dominique Ellison is in the process of obtaining the Certified Fraud Examiner certification;
- In FY 2016 we have mentored three UC co-op students, one of whom now has accepted an offer of employment from Deloitte

Strategic Goal #2 – Cross train internal audit team:

- We are continuing to cross train the team on continuous audit procedures and the IDEA software;
- Kate has begun training the staff in grant audit work

Strategic Goal #3 – Improve network throughout the university:

- Christine has assisted the Chief Risk Officer with the implementation of Enterprise Risk Management, including participating in ERM interviews with over 100 individuals across the university and its affiliates;
- Christine and Anita Ingram presented on the topic of collaboration between Risk Management and Internal Audit in Enterprise Risk Management at both the ACUA and University Risk Management and Insurance Association (URMIA) annual conferences;
- Christine participates on the Bias Incident Response Team (BIRT);
- Christine participates on the Compliance Board;
- Dominique Ellison was elected to be the Treasurer of UC Association of Administrators, Managers and Professionals (UCAAMP);
- Jason has participated as a non-voting member of various IT governance committees;
- We have worked with a committee of students commissioned by student government to make the hotline more marketable to students. This has included redesigning the main hotline webpage to make it more user friendly, utilizing suggestions from the student group.
- IA team members attended the UC 2015 diversity and inclusion conference

Strategic Goal #4 – Improve Use of Technology:

- We have added new queries related to purchasing card usage to our continuous audit procedures
- The team attended IDEA training to learn how to better utilize the tool

Strategic Goal #5 – Prepare for a Successful Quality Assessment Review:

- We have updated our Internal Audit handbook/manual;
- We have completed approximately 80% of our internal assessment

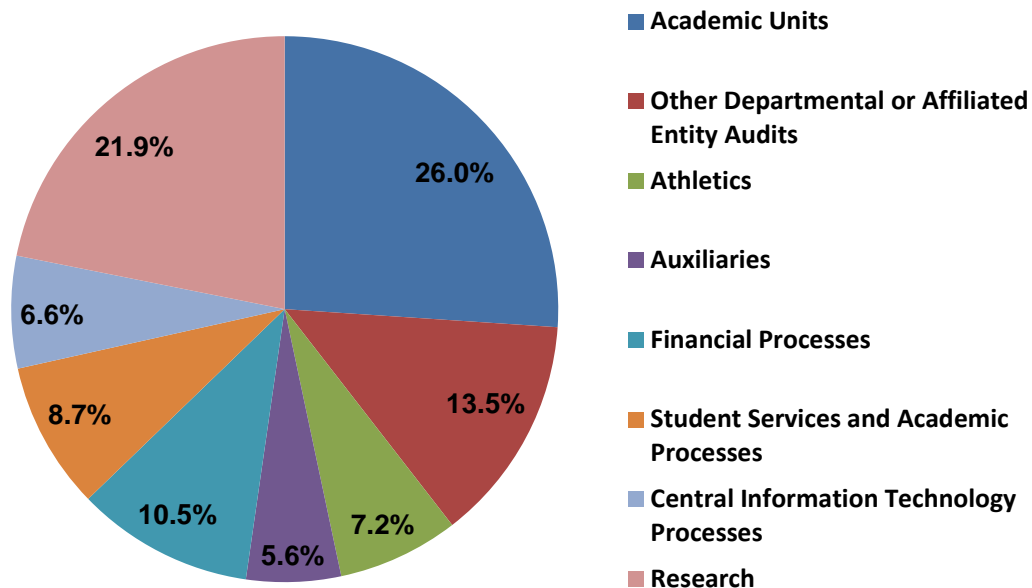## III. Proposed Five Year Internal Audit Plan

Selection Process

Our proposed five year plan was driven by a risk assessment of our audit universe using a standard model and was aligned with some of the goals and key actions of the university's strategic plan. We anticipate updating our risk assessment and our audit plan each year, but we believe that it is important to present a longer term vision to the university and the Audit and Risk Management Committee. We developed our plans using this model and identifying risks through:

- Discussions with university executives, including academic, administrative and finance through the Enterprise Risk Management process
- Review of expenditure levels in various functions/department
- Knowledge obtained through prior audit work
- Review of industry risks
- Risks identified by external auditors
- Requests from senior management

The results of our work, as well as the status of findings from previous audits performed, will be communicated to the audit committee.

The chart beginning on the next page contains the detailed audit plan for the next five years. While we focus on high risk areas we also try to provide well-balanced coverage across the university. The following chart shows the distribution of audit coverage by university component for FY 2017.

FY 2017
Audit Coverage by University Components

Legend:
- Academic Units
- Other Departmental or Affiliated Entity Audits
- Athletics
- Auxiliaries
- Financial Processes
- Student Services and Academic Processes
- Central Information Technology Processes
- Research

Chart values: 26.0%, 13.5%, 7.2%, 5.6%, 10.5%, 8.7%, 6.6%, 21.9%

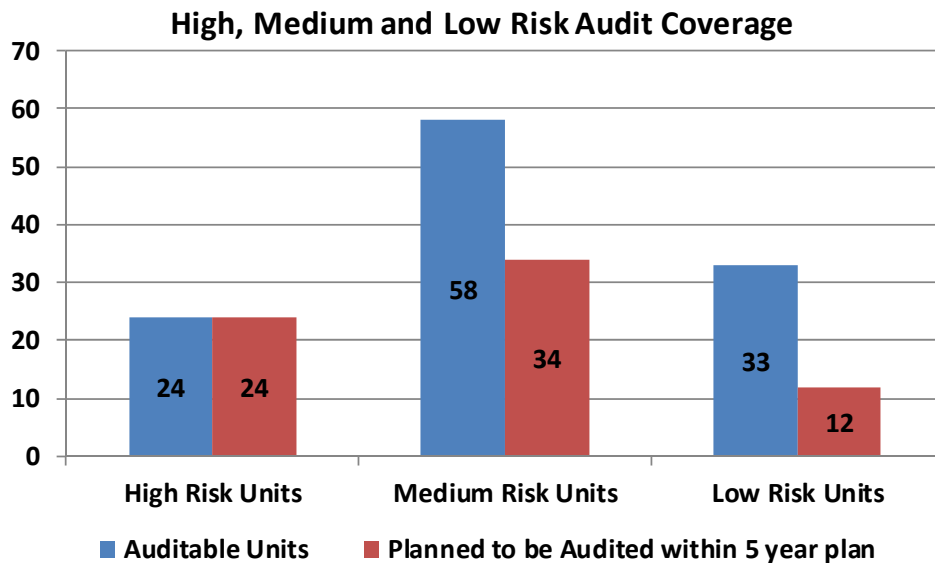| Fiscal Year	Est. Hours 2016-2017	Est. Hours 2017-2018	Est. Hours 2018-2019	Est. Hours 2019-2020	Est. Hours 2020-2021	Est. Hours Total
Planned Hours Available (1)	11,900	12,800	12,800	12,800	12,800	63,100
General Audit Projects:						
Departments/Colleges/Units						
Colleges (3):						
College of Arts & Sciences (continued from FY 2016)	200					200
College of Engineering and Applied Science	800					800
College of Law	450					450
Education, Criminal Justice and Human Services		600				600
College of Nursing		450				450
UC Blue Ash		500				500
College of Business			500			500
College of Medicine			800			800
Design, Art, Architecture and Planning				500		500
College Conservatory of Music				500		500
University Libraries				300		300
College of Allied Health					500	500
College of Pharmacy					500	500
UC Clermont					500	500
Athletics:						
Olympic Sports	120				120	240
NCAA football attendance certification **(2)**	10	10	10	10	10	50
Men's and Women's Basketball		160				160
Football			160			160
NCAA Compliance Requirements:						-
Extra Benefits	280				280	560
Playing and Practice Seasons		50				50
Student-Athlete Employment		80				80
Amateurism		70				70
Governance and Organization			20			20
Eligibility			125			125
Academic Performance Program			30			30
Investigations and Self Reporting of Violations			10			10
Rules Education			20			20
Commitment of Personnel to Rules			80			80
Recruiting				300		300
Camps and Clinics				50		50
Campus Services:						
Parking	200					200
Contract Audits:						
Kingsgate Conference Center - Marriott contract	120			120		240
Aramark Food Contract		120			120	240
Bookstore/retail - Follett contract			120			120

Fiscal Year	Est. Hours 2016-2017	Est. Hours 2017-2018	Est. Hours 2018-2019	Est. Hours 2019-2020	Est. Hours 2020-2021	Est. Hours Total
Planned Hours Available (1)	11,900	12,800	12,800	12,800	12,800	63,100
General Audit Projects:						
Departments/Colleges/Units						
Other Departmental or Affiliated Entity Audits:						
Executive Management expenditures	120	120	120	120	120	600
UC Research Institute	350	350	350	350	350	1,750
Student Affairs - Veterans Services	300					300
Centers and Affiliates			500			500
Student Affairs - Health & Wellness (counseling center)			300			300
Facilities Management				500		500
Hoxworth Blood Center				300		300
Transportation Services				300		300
Lab Animal Medical Services					300	300
Office of Ent. Affairs and Tech. Commercialization					300	300
College of Law - employment and financial reporting	40	40	40	40	40	200
Processes (4):						
Finance and Administration:						
Construction	200	200	200	200	200	1,000
Financial Close/Reporting/Budgeting	200					200
Treasurer - Tax Compliance	200					200
Payroll/Compensation		500				500
Emergency Preparedness		300				300
Student Billing and Collections		500				500
Gift Administration			500			500
Debt Management			250			250
Treasurer - Operations, Cash Transactions			250			250
Employee Benefits				500		500
Purchasing to Disbursements				500		500
Capital Assets					300	300
Hiring and Termination Process					500	500
Endowment and TIP Investing (Investment Office and Treasurer - Investment Reporting/Monitoring)					425	425
Student Services and Academic Processes:						
Financial Aid- scholarships (non federal)	500					500
Title IX and Clery Act Reporting		500				500
Federal Student Financial Aid (compliance)		500				500
Student Support Services - Advising, academic progress			380			380
Grading (grade changes, security)				300		300
Program and Course review					300	300

Fiscal Year	Est. Hours 2016-2017	Est. Hours 2017-2018	Est. Hours 2018-2019	Est. Hours 2019-2020	Est. Hours 2020-2021	Est. Hours Total
Planned Hours Available (1)	11,900	12,800	12,800	12,800	12,800	63,100
Grant Audits:						
A&S - Psychology	100					100
COM - Internal Medicine	300					300
CEAS - Biomedical, Chemical & Environmental Engineering	400					400
Allied Health - Communications Sciences & Disorders	300					300
COM - Psychiatry	150	150				300
College of Nursing - Academic Nursing		300				300
COM - Emergency Medicine		300				300
A&S - Biological Sciences		400				400
COM - Molecular & Cellular Physiology		100	200			300
CEAS - Mechanical & Materials Engineering			400			400
COM - Cancer and Cell Biology			300			300
Human Research Protection Program			300			300
COM - Neurology			50	250		300
A&S - Mathematical Sciences				400		400
Hoxworth Blood Center				300		300
COM - Pathology & Laboratory Medicine				300		300
CEAS - Civil & Architectural Engineering & Construction Management					400	400
COM - Anesthesia					300	300
A&S - Geology					300	300
College of Allied Health - School of Social Work					250	250
Centralized Information Technology (IT) Audits/Consultations:						
Central IT - Data Processing Center	180					180
Central IT - Server Virtualization (VMWare)	200					200
Central IT - elearning (Blackboard)		200				200
Business Core Services - UCFlex (SAP) Security		200				200
Central IT - Database Management & Security		200				200
Central IT - email system management			140			140
Central IT - IT Budgeting and Procurement review			200			200
Central IT - Information Security Management			200			200
Central IT - Disaster Recovery Planning			200			200
Central IT - Identity Management (CLS System)			200			200
Central IT - Active Directory Management				80		80
Central IT - Vendor Management/Contract Administration				200		200
Central IT - Change Management and Service Desk				200		200
Central IT - CQ Web Presence				200		200
Central IT - Network Perimeter & Remote Access					200	200
Central IT - Cloud Computing Management					200	200
Central IT - IT Tactical & Strategic Management					200	200
Other:						
Unplanned projects	940	660	605	740	845	3,790
Continuous audit work	1000	1000	1000	1000	1000	5,000
Training/CPE	240	240	240	240	240	1,200
Administrative time	2500	2500	2500	2500	2500	12,500
Follow up work on previous audits	1500	1500	1500	1500	1500	7,500
Total Estimated Hours	11,900	12,800	12,800	12,800	12,800	63,100

Notes to Audit Plan Schedule:

(1) Total hours, less expected vacation, sick and holiday time.
(2) This is a compliance obligation that is required to be performed each year.
(3) These are audits of the colleges' business processes and financial transactions, which include items such as purchasing card usage, travel expenditures, other disbursements, payroll and human resource practices, cash handling, and reviews of certain operational activities, etc. Our IT auditor also performs an audit of the general computer controls in these decentralized IT units.
(4) The objectives of these audit activities are primarily to audit the processes/controls in these various areas.

The following chart demonstrates the coverage of high, medium and low risk areas in the audit plan above:

High, Medium and Low Risk Audit Coverage

Chart showing Auditable Units (blue) vs Planned to be Audited within 5 year plan (red):
- High Risk Units: Auditable Units 24, Planned 24
- Medium Risk Units: Auditable Units 58, Planned 34
- Low Risk Units: Auditable Units 33, Planned 12

■ Auditable Units   ■ Planned to be Audited within 5 year plan

IV. 2016-2017 Internal Audit Strategic Goals

As indicated in the Executive Summary of our plan, we have goals identified in our strategic plan for developing a strong internal audit program. For 2015-2016 we have identified several key activities that we will perform to achieve these goals. Several of these initiatives are department wide.

Initiative	Audit Owner
Strategic Goal: Build and maintain a diverse, quality audit team that provides opportunities for development and advancement of personnel.	
Initiative: Increase the professional certifications in our office	**Ellison/Ford**
Initiative: Create a comprehensive, individualized training plan for all staff that comprehends strengths and weaknesses	**Ackerman**
Initiative: Support the university's diversity and inclusion efforts by having all audit team members attend at least one inclusive excellence workshop and/or the university's diversity conference.	**All**
Strategic Goal: Cross train personnel to prevent a knowledge gap in certain areas if/when personnel leave the office.	
Initiative: Transition of grant audit skills from Kate Lash to rest of team. Staff should continue to work with Kate Lash on grants audits and Kate should work on general audit projects. By the end of 2017 Zachary should be prepared to lead grant audits with limited supervision and guidance from Kate. The new staff auditor should have assisted Kate on grant audits and, thus, be familiar with grant compliance related resources and risks.	**Lash/Green/ Ellison/Ford**
Initiative: Transition of basic general computer control and application control audit steps from IT Auditor to rest of the team. Kate, Zachary and Dominique should work with IT Auditor when auditing decentralized IT units. This will free some of IT Auditor's time so he can spent more effort on higher risk centralized IT audit projects.	**IT Auditor/Lash/ Green/Ellison/ Ford**
Initiative: Transition of IDEA/continuous audit knowledge from Jason Green to rest of team. This is in process and has been occurring.	**Green/Ellison/ Ford**

Initiative	Audit Owner
Strategic Goal: Improve network throughout the university so that our department is integrated with other university departments and functions.	
Initiative: Continue to be involved with key University initiatives, such as committees, task forces, learning events and volunteer activities.	**All**
Initiative: Quarterly meetings or lunches with management, business administrators and others.	**All**
Initiative: Look for opportunities for our team members to conduct training or presentations to the university community. Develop a periodic newsletter of internal audit trends so that the university community can be aware of general, common findings and work to correct them before we perform our audits.	**All**
Strategic Goal: Use technology to more effectively and efficiently perform our work.	
Initiative: Continue to expand the use of IDEA during our continuous audit procedures, for example, start to incorporate new queries into our continuous audit process.	**Ackerman/All**
Strategic Goal: Conduct a successful Quality Assurance Review in FY 2017	
Initiative: Identify a team of qualified, external peer reviewers.	**Ackerman**
Initiative: Complete self assessment and draft report.	**All**