

Florida Gulf Coast University
Lutgers College of Business
Department of Accounting
Accounting Information Systems
Syllabus for CRN 12652 Spring 2020

Dr. Elizabeth Johnson, CPA
Assistant Professor
Lutgers College of Business
ejohnson@fgcu.edu
Office: LH 3331

Course Information

Credit Hours: 3
Course mode: On-campus
Class Location: Lutgers Hall (LH) 2210
Class time: Sat 7:30 – 10:15 AM

Office Hours: Monday (LH3331) 12:00 – 4:30 PM and Saturday (LH2210) 7:00 – 7:30 AM (or by appointment. Best way to contact me is via email.

Introduction: Welcome to ACG 6405 I am Professor Elizabeth Johnson. I am a retired Air Force Navigator with 13 years of Big4 ITGC auditing experience. In this Accounting Information Systems (AIS) course we will cover accounting systems concepts provided by COBIT framework which is needed by accountants to understand information flows in business events and processes, and how to minimize risk to the integrity of data. In my experience ITGC is the starting point of every audit. This course will provide you with the opportunity to accomplish the steps IT auditors accomplish to test Information Technology General Controls. We will explore the use of technology tools like visio (flow charting), excel and IDEA (data analytics) to analyze business processes, events, and accomplish ITGC testing. Concepts taught in this course build on materials taught in introductory Computing (ISM 3011), Introductory Accounting (ACG 3103), and Auditing 1 (ACG 4632) courses and extends the concepts used in Accounting Information Systems (ACG 3401).

Teaching Philosophy

To get the most out of education you need an interactive process between student and professor which is intended to establish a solid basis for lifelong learning. In today's business environment you need to be prepared for ever changing and complex accounting tasks. These tasks may be completed all in one sitting for one client or may be intermingled with several other client tasks or other tasks for different clients that need to be completed to accomplish the assigned engagement/engagements. I encourage you to develop a process by which you can cypher through the information provided for you, identify the issue/issues, determine what other information you may need to confirm the issue, and provide suggestions on how the issue can be resolved. In most instances the issue you initially identify may not be so straightforward and you will need additional investigation to reach a conclusion and provide suggestions.

Course Description: The main objective of this course is to provide real world case studies that will prepare you for the first couple of years as an IT auditor. These assignments will allow you to practice IT auditing procedures and preparing work papers for the audit file. Additionally, we will consider what the future of auditing looks like with the introduction of Artificial Intelligence (AI) in the accounting world.

At the beginning of each class two students will discuss their Artificial Intelligence article that they have submitted on canvas or an journal/paper article on any IT related topic that affects accounting/auditing. The students should volunteer to present in the previous class, if no student volunteers two students will be selected randomly and the professor will provide an article for them to present. I expect each student to have read the articles being presented and to be prepared to discuss the articles in class.

Objectives	Goals	Assessment
Understand the business environment	<ul style="list-style-type: none"> • Describe the COBIT framework and how it is used to identify and accomplish ITGC testing. • Relate the concepts from the course to what ITGC auditors do in the workplace. 	Quizzes and Project
Be effective problem solvers	<ul style="list-style-type: none"> • Execute ITGC testing and data analytics procedures utilizing different IT tools (visio, excel, IDEA, etc). • Analyze results from ITGC testing and/or data analytics to consider the risks associated with issues identified and identify other areas of analysis. • Evaluate the technology currently used in auditing firms to accomplish data analytics and ITGC testing. • Propose and justify how artificial intelligence can move the accounting profession to the 21st century. 	Exercises and Project
Be effective communicators	<ul style="list-style-type: none"> • Describe how technology is helpful in completing your tasks and how it can be harmful. • Research and present on how artificial intelligence is used in the auditing firms and propose how it might be used in the future. • Transfer knowledge to others in the class through the accomplishment of peer review of other group's research projects. • Be excited about the future use of artificial intelligence in auditing. 	Project and Presentation
Have interdisciplinary business knowledge	<ul style="list-style-type: none"> • Correlate and communicate the future technology uses by audit firms to current day activities. • Relate the concepts from the course to what ITGC auditors do in the workplace. 	Project and Presentation

Major Assignments: There will be four ITGC exercises in this course where you will be given the task to perform that supports the testing in one of the ITGC areas (Security, Change Management, and Application Controls). For each exercise you will do the following tasks:

- Identify the business risk associated with the task being performed
- Perform the assigned task
- Analyze the results from the assignment
- Quantify the ramifications of any control failures identified during performing the assignment

Once you have completed the exercise you will be able to analyze the results of the testing and write a memo (work paper) to document the procedures you performed results of the assignment, ramifications/risks of any issues identified and next steps to quantify the risks identified.

There will also be two data analytics/visualization exercises that will allow you to accomplish tasks within Excel or IDEA and analyze the results of those tasks. All exercises are worth 50% of your final grade

In groups of two or three, you will accomplish a research paper and presentation that may change your perception of how auditing will be accomplished in the future as you consider the following questions:

1. What technology are current audit firms using to accomplish ITGC testing, data analytics and fraud analysis?
2. What is Artificial Intelligence (AI)?
3. How is AI used by accountants in the business context or in an auditing context?
4. How can audit firms utilize AI to complete the audit?
5. What do you see as the future of staff auditors in a world where audit firms and accountants use AI to accomplish their jobs?

Groups will be assigned the first day of class so that you can get started on the project right away. I will also assign an audit firm to each group so your team can focus on one firm when considering the answer to the first question. The paper should around 10 pages but no more than 15 pages double space, time new roman, 12 font and one inch margins. You will also swap papers with another group who will provide a peer review of your paper. You will not only turn in the final paper but also the peer reviewed paper as part of your final submission. I suggest that you use Scholar Google to look for current research in AI. Below are a couple of articles that I found on Scholar Google or the Economist that you may find interesting:

- <https://msbfile03.usc.edu/digitalmeasures/doleary/intellcont/AI%20and%20Society%20-%20Accounting%20Work-1.pdf>
- <http://home.eng.iastate.edu/~guan/course/backup/CprE-592-YG-Fall-2002/paper/intrusion/ai-id.pdf>
- <http://search.proquest.com/docview/923404646?pq-origsite=gscholar>
- [http://onlinelibrary.wiley.com/doi/10.1002/\(SICI\)1099-1174\(199909\)8:3%3C159::AID-ISAF169%3E3.0.CO;2-W/full](http://onlinelibrary.wiley.com/doi/10.1002/(SICI)1099-1174(199909)8:3%3C159::AID-ISAF169%3E3.0.CO;2-W/full)
- <http://www.economist.com/news/leaders/21705318-clever-computers-could-transform-government-power-learning?zid=291&ah=906e69ad01d2ee51960100b7fa502595>
- <http://www.economist.com/news/science-and-technology/21701096-concerns-abound-about-impact-artificial-intelligence-could-history?zid=291&ah=906e69ad01d2ee51960100b7fa502595>

You will present your research paper in the last two class period where you will provide the answers to the proposed questions. The presentations should be around 18 minutes long but no longer than 20 minutes long. Together as a class we will work on the grading rubric for both the paper and presentation during the first class period. The project (due Apr 4th) and presentation (due Apr 11 & 18th) are worth 25% of your final grade

Required course material:

Information Technology Auditing, 4e; James A. Hall; ISBN 9781133949886; Cengage Learning

Grading

Assessment	Points	Weight
Chapter Quizzes	200	20%
Flow Charting	50	5%
Segregation of Duties	100	10%
Testing of IT Access Controls	100	10%
Spreadsheet Controls	50	5%
Accounts Receivable Excel Exercise	100	10%
Accounts Receivable/Payable IDEA Exercise	100	10%
Integrated Project and Presentation	300	30%
Total	1000	100%

Grades are based on points (**not percentages**) and determined as follows:

Grade	Points	Grade	Points
A	900	B	800
C	700	F	<700

There are **no** make ups for missed quizzes. If a student cannot take a quiz because of a university excused absence this counts as a missed quizzed.

All student work (i.e., assignments, quizzes, and projects) submitted must be the students own original work for this course. Submitting work obtained from other students (past or present) or from publisher, author support materials or any other sources is prohibited and allowing another student to submit your work as their own is prohibited. Failure to comply can result in a grade of zero for the student submission and/or course failure. Please carefully read the University statement on Academic Dishonesty (below) as all of its provisions apply.

As of fall 2015, all faculty members are required to confirm a student's attendance for each course by the end of the first week of classes. Failure to do so will result in a delay in the disbursement of your financial aid. The confirmation of attendance is required for all students, not only those receiving financial aid. As such, there is an activity in Canvas, Article, that each of you need to complete by January 11th.

Preliminary Course Outline: Below is a preliminary list of topics and pre-reading assignments by week. In addition, pre-work, homework, etc. will be assigned throughout the semester.

Class date ...	Topics/Activities	Required Pre-Reading
January 11	Overview of the class Introduction to accounting and auditing automation	Ch 1 Read on your own Ch 2 <i>Upload article on canvas Jan 11th</i> <i>Segregation of Duties_Due Jan 25th</i>
January 18	Client Interview (Segregation of Duties Assignment) ITGCs Access and Security	Ch 3 <i>Test of IT Access Controls _ Due Feb 8th</i>
January 25	Client Interview (IT Access Controls) ITGCs Access and Security	Ch 4
February 1	ITGCs Change Management	Ch 5:
February 8	ITGCs Application Controls	Read Ch 6 on your own Ch 7
February 15	ITGCs Auditing the Revenue Cycles	Ch 9 <i>Flow Charting _ Due Feb 29th</i>
February 22	ITGCs Auditing the Expenditure Cycles	Ch 10:
February 29	ITGCs System Implementation	Ch 11
<i>March 2-7</i>	<i>Spring Break – no class</i>	
March 14	Introduction to data analytics – Power BI data visualization	Power BI In Class Exercise – <i>Paper for Peer Review due Mar 21st</i>
March 21	Power BI – data analytics	Power BI In Class Exercise – <i>Excel Spreadsheet Controls _ due Mar 28th</i>
March 28	Excel - data analytics	Excel In Class Exercise – <i>A/R Analysis in Excel _ Apr 4th</i>
April 4	IDEA – data analytics and visualization	IDEA In Class Exercise <i>Final Project Paper – due Apr 4th</i>
April 11	IDEA – data analytics and visualization	IDEA In Class Exercise _ <i>A/R Analysis in IDEA due Apr18th</i>
April 18	Class Presentations (4 teams)	Final Project Presentation
April 25	Class Presentations (2 teams)	Final Project Presentation

Class date ...	Topics/Activities	Required Pre-Reading
May 02	Class Presentations (2 teams)	Final Project Presentation

Departmental Policies and Resources

1. CALCULATOR: Texas Instruments BA II PLUS. NOTE: The required calculator is the only electronic device allowed to be used during class. **UNLESS PERMITTED BY THE INSTRUCTOR, THE USE OF ALL OTHER ELECTRONIC DEVICES** (phones, pads, laptop computers, etc.) is PROHIBITED DURING CLASS.
2. The schedules for the departmental courses offered (information on semester, day/night, other) are at: ACG, TAX, and BUL (BS) – go to the ACG MS program link on the LCOB web page and click on “curriculum map” on left.
3. Planning for pre-registration and graduation is your responsibility: The above schedules and LCOB advisors, along with the course prerequisite sequences described in the FGCU Catalog and degree program sheets, should assist you in ensuring that your plans are successfully implemented. Course substitutions and prerequisite exceptions will be granted only for exceptional circumstances that are clearly beyond the student's control. Poor or lack of planning is not one of those circumstances.
4. Useful FGCU Resources:
Florida Gulf Coast University Catalog (<http://www.fgcu.edu/catalog/>)
Florida Gulf Coast University Student Guide Book (<http://studentservices.fgcu.edu/JudicialAffairs/>)
Florida Gulf Coast University Code of Conduct (<http://studentservices.fgcu.edu/JudicialAffairs/>)

Course Requirements

Individual – This is a master’s course so I expect everyone is prepared to discuss the chapters in class along with the articles that will be assigned to two students for presentation each class period. There are eight (8) chapters covered in the class and you can expect 5 or more quizzes of which the five highest quiz grades will be used to compute your quiz points. You will also have several case studies that you will be required to submit a memo discussing the risks the control is associated with, test procedures you performed, analysis of testing results to include a conclusion and next steps to perform.

Project –

An integrated project is required. Students will be assigned to groups for this project; student grades for this assignment will be based on the group submission AND individual contribution to the assignment. **This means students in the same group may receive different grades for the integrated project.**

Assignments

All assignments are due 15 minutes before the beginning of class, on the due date in the schedule of course activities (below), unless otherwise specified. Students should be prepared to discuss assignments. **No late assignments** will be accepted.

Attendance Policy

All students are expected to prepare for and participate in class. You are expected to be an active participant in the learning process. Students who feel somewhat timid about verbal participation are strongly encouraged to give it a try. A good way to start is by bringing in accounting/industry news. There is no safer place to exercise your speaking skills than in class. Obviously, to make a contribution,

you must attend class. Excellence means being prepared, attentive, and involved.

Exam or Quizzes

The quizzes may include any or all of the following question types: multiple choice, short answer, applied problems, or case analyses. The examination is based on material in the textbook and on class lectures.

Incompletes

Incompletes are only granted in extreme circumstances, not for work-related deadlines, prior personal commitments, or falling behind in readings or assignments. An instructor may only grant an incomplete if the student has completed 60% of the course work and has maintained a 'B' in the completed course work. Instructors have the right to deny requests for Incompletes, and/or require work for incompletes to be submitted prior to the maximum 12-month extension referenced in FGCU's policy.

UNIVERSITY STATEMENTS

1. Academic Behavior Standards and Academic Dishonesty

All students are expected to demonstrate honesty in their academic pursuits. The university policies regarding issues of honesty can be found in the FGCU Student Guidebook under **the Student Code of Conduct and Policies and Procedures** sections. All students are expected to study this document which outlines their responsibilities and consequences for violations of the policy. The FGCU Student Guidebook is available online at <http://studentservices.fgcu.edu/judicialaffairs/new.html>

2. University Nondiscrimination Statement

Florida Gulf Coast University is committed to ensuring equity and fairness for all University employees, students, visitors, vendors, contractors and other third parties. As such, the University prohibits discrimination on the bases of race, color, national origin, ethnicity, religion, age, disability, sex (including sexual harassment/assault), gender identity/expression, marital status, sexual orientation, veteran status or genetic predisposition with regard to admissions, employment, programs or other activities operated by the University. This prohibition extends to enforcement of **Title IX** of the Education Amendments of 1972. Questions or complaints should be directed to the Office of Institutional Equity and Compliance (OIEC). The OIEC's phone number is (239)745-4366; the OIEC email address is OIEC@fgcu.edu.

3. Disability Accommodations Services

Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university's guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please see me or contact the Office of Adaptive Services. The Office of Adaptive Services is located in the Wellness Building. The phone number is 239-590-7956 or Video Phone (VP) 239-243-9453. In addition to classroom and campus accommodations, individuals with disabilities are encouraged to create their personal emergency evacuation plan and FGCU is committed to providing information on emergency notification procedures. You can find information on the emergency exits and Areas of Rescue Assistance for each building, as well as other emergency preparedness materials on the Environmental Health and Safety and University Police Department websites. If you will need assistance in the event of an

emergency due to a disability, please contact Adaptive Services for available services and information.

Counseling and Psychological Services (CAPS) provides free counseling and therapy services (including psychiatry) to all FGCU students. Please walk in to the second floor Howard Hall office any week day between 8:30 and 4:30 to schedule an initial contact appointment. Visit the CAPS website at www.fgcu.edu/caps for more information. CAPS offers a 24/7 Helpline at (239) 745-3277 (EARS).

4. Student Observance of Religious Holidays

All students at Florida Gulf Coast University have a right to expect that the University will reasonably accommodate their religious observances, practices, and beliefs. Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances. Where practicable, major examinations, major assignments, and University ceremonies will not be scheduled on a major religious holy day. A student who is to be excused from class for a religious observance is not required to provide a second party certification of the reason for the absence.

5. Center for Academic Achievement

The Center for Academic Achievement (CAA) provides academic support services to all FGCU students. Students can take advantage of our free peer tutoring and Supplemental Instruction sessions for lower-level math and science courses, as well as workshops to facilitate the development of skills necessary for college success. If you would like to participate in any of our programs, learn about tutoring services, or meet with an Academic Retention Coordinator, please visit the CAA in Library 103 or call us at (239) 590-7906. Our website is www.fgcu.edu/caa.

6. FGCU Vision and Mission Statement

Vision: Florida Gulf Coast University will achieve national prominence in undergraduate education with expanding recognition for graduate programs. (Approved Jan 19, 2010 by BOT)

Mission: M1: Established on the verge of the 21st century, Florida Gulf Coast University infuses the strengths of the traditional public university with innovations and learning-centered spirit, its chief aim being to fulfill the academic, cultural, social, and career expectations of its constituents.

M2: Outstanding faculty uphold challenging academic standards and balance research, scholarly activities, and service expectations with their central responsibilities of teaching and mentoring. Working together, faculty and staff of the University transform students' lives and the southwest Florida region.

M3: Florida Gulf Coast University continuously pursues academic excellence, practices and promotes environmental sustainability, embraces diversity, nurtures community partnerships, values public service, encourages civic responsibility, cultivates habits of lifelong learning, and keeps the advancement of knowledge and pursuit of truth as noble ideals at the heart of the university's purpose (Approved Jan 19, 2010 by BOT).

7. Lutgert College of Business Vision and Mission Statement:

Vision: The Lutgert College of Business will be known for excellence in applied business education.

Mission: The Lutgert College of Business educates and engages students and businesses in a collaborative community. We offer high quality educational programs that prepare our students to thrive in their professional careers.

8. Accounting Department Vision and Mission Statement:

Vision: To be the destination of choice for students who aim to master subject matter in the accounting curriculum and develop successful careers based on an accounting education.

Mission: To prepare students for entry level careers in public accounting, service organizations, government, and industry by ensuring that:

1. Graduates are technically competent and possess the full range of business and professional skills; and
2. Faculty members employ cutting edge instructional methods and technologies, anchored by a balanced mix of applied/educational/basic research outcomes and institutional/professional/academic/community service.