

## **Applications Development for Online Environments**

#### BUSI 3401 – Winter 2018

#### **Class Times**

Section	Day	Time
Α	Thursday	18:05 – 20:55 hrs.

#### **INSTUCTOR**

## Dr. Alejandro Ramirez

Office: DT1722

Phone: 613 520 2600 ext. 2397

Office Hours: Thursdays 17:00 – 18:00 hrs. or by appointment

Email: <u>Alex.Ramirez@Carleton.ca</u>

## **PREREQUISITES**

BUSI 2402 and BUSI 3400, or COMP 1005 and COMP 3005 (with a grade of C- or higher in each) Precludes additional credit for BUSI 4401(no longer offered)

#### **COURSE DESCRIPTION**

BUSI 3401 [0.5 credit]

Applications Development for Online Environments

Analysis, design and implementation of electronic business systems. Topics include advanced object-oriented programming, advanced SQL programming, XML, using ASP.NET, MTS and SQL Server.

## **COURSE OVERVIEW**

This term we will be exploring the world of App Development using Android's Studio & Apple's XCode. The App Economy emerged along with Apple's innovative products, their iPhone, iPod Touch and iPad. Two other platforms that now contribute to the App Economy, Google's Android App Store and Microsoft's Windows App Store. These can be explored as part of your Project (if you want), but in this course, we will use Google's Android Studio and Apple's XCode to work.

There are aspects in this course dealing with the analysis, design and implementation of electronic business systems, but these are concentrated in portable, mobile devices. Object oriented programming is still the paradigm used, but we will be using Java for mobile devices and Swift as languages of choice and development platform. Swift is a new language that was designed for Programmers that had worked with Java, among other languages. Major differences will be explained in one of the sessions before using the language. Issues of accessing databases are covered using the device's innate form of addressing these issues.

We focus on one specific type of applications: the App. This is a business course, our main goal is to understand how these new devices and applications are transforming the world of business. Emphasis on the course include: business impact, such as BYOD strategies, security and strategic use of IS.

#### **TEXTBOOKS**

## For Android Development

Android Programming: The Big Nerd Ranch Guide 3<sup>rd</sup> Edition

Bill Phillips, Chris Stewart, Kristin Marsicano

Person Education

ISBN: 978-0134706054

## For iOS Development

iOS Programming: The Big Nerd Ranch Guide

6<sup>th</sup> Edition

Christian Keur & Aaron Hillegass

Person Education

ISBN: 978-0134682334





#### **EVALUATION**

Students will be evaluated in this course according to the following:

Component	Weight %	
2 Assignments		30%
First [Due: February 15, 2018]	10%	
Second [Due: March 29, 2018]	20%	
Individual Project		30%
Proposal [Due: February 1, 2018]	5%	
Presentation [Due: April 5, 2018]	10%	
Final Report [Due: April 11, 2018]	15%	
Group-led Session		15%
Take home Final Exam [Due: April 26, 2017]		25%

## Assignments

Two Individual Assignments are due on CU-Learn at the date and time indicated on the course's website. Marks and marked assignments will be available through our Learning Management System as well.

#### Late Assignments

There will be a 24 hours window to submit late assignments. If an assignment is marked late it will be penalized 25%. No assignments will be accepted after that. Missed assignments will be tabulated as 0.

## Individual Project

This project accounts for 30% of the final grade. Here you will have the opportunity to explore a business issue that may be addressed using an App. This project can be theoretical or applied. If interested, you can explore the Windows App development process. The instructor must approved it. A project proposal is required. It can be submitted at any time, but no later than at the end of the fourth lecture. For the reminder of the term, you will be working on your project. A formal submission of the project will be on the last day of classes. As part of the project's assessment, there is a class presentation of your project during the last lecture of the term.

## Group-Led Session

In our second lecture, we will form groups. These groups will help the instructor to manage one lecture between week 4 and week 11. As a group, you need to decide how you want to run the session to explore the theme(s) assigned for that lecture.

#### Take-Home Final Exam

The final exam will be a take home exam due on April 26, 2018 by 10:00 PM. It will build upon the two assignments. It is extremely important that you work on those assignments to be able to work on the final exam. You will need to have a 50+ average in the two assignments to be able to write the final exam.

#### **DETAILED COURSE SCHEDULE\***

Lecture/Date	Торіс	Deadlines
Lecture 1 January 11	Welcome to the course – course administration – The App Economy	
Lecture 2 January 18	Introduction to Android Studio [AP: Chapter 1]	Group formation
Lecture 3  January 25	Android Apps I [AP: Chapters 2 & 3]	
Lecture 4 February 1	Android Apps II → GROUP I [AP: Chapters 4, 5 & 6]	Individual Project approval deadline
Lecture 5 February 8	Android Apps III → GROUP II [AP: Chapters 7 & 8]	
Lecture 6 February 15	Android Apps IV → GROUP III [AP: Chapters 9 & 10]	Assignment 1
February 22	Reading Week	
Lecture 7 March 1	Android Apps V → GROUP IV [AP: Chapters 11 & 12]	
Lecture 8 March 8	Introduction to iOS Apps, Objective-C and Swift	
Lecture 9 March 15	iOS Apps I [iOS: Chapter 1]	
Lecture 10 March 22	iOS Apps II → Group V [iOS: Chapters 10 & 11]	
Lecture 11 March 29	iOS Apps III → GROUP VI [iOS: Chapters 12 & 13]	Assignment 2
Lecture 12 April 5	Course wrap up – the tip of the iceberg	Individual Project presentations

Note: While every attempt will be made to keep to the schedule listed above, unforeseen circumstances may necessitate modifications throughout the semester.

#### **ADDITIONAL INFORMATION**

#### **Course Sharing Websites**

Materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

#### **Required calculator in BUSI course examinations**

If you are purchasing a calculator, we recommend any one of the following options: Texas Instruments BA II Plus (including Pro Model), Hewlett Packard HP 12C (including Platinum model), Staples Financial Calculator, Sharp EL-738C & Hewlett Packard HP 10bII

## **Group work**

The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more group tasks/assignments/projects in this course. Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

A + = 90 - 100	B+ = 77-79	C + = 67 - 69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A - = 80-84	B - = 70-72	C - = 60-62	D - = 50-52
F = Below 50			

Grades entered by Registrar:

WDN = Withdrawn from the course

DEF = Deferred

## Academic Regulations, Accommodations, Etc.

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here: http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/

## **Requests for Academic Accommodations**

For Students with Disabilities:

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or <a href="mailto:pmc@carleton.ca">pmc@carleton.ca</a> for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your *Letter of Accommodation* at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (*if applicable*). Requests made within two weeks will be reviewed on a case-by-case basis. After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website (<a href="www.carleton.ca/pmc">www.carleton.ca/pmc</a>) for the deadline to request accommodations for the formally-scheduled exam (*if applicable*).

## For Religious Obligations:

Students requesting academic accommodation on the basis of religious obligation should make a formal, written request to their instructors for alternate dates and/or means of satisfying academic requirements. Such requests should be made during the first two weeks of class, or as soon as

possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory event.

Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved. Instructors will make accommodations in a way that avoids academic disadvantage to the student.

Students and instructors can confirm accommodation eligibility of a religious event or practice by referring to the Equity Services website (<a href="http://carleton.ca/equity/accommodation/religious-observances/">http://carleton.ca/equity/accommodation/religious-observances/</a>) for a list of holy days and Carleton's Academic Accommodation policies. If there are any questions on the part of the student or instructor, they can be directed to an Equity Services Advisor in the Equity Services Department for assistance.

## For Pregnancy:

Pregnant students requiring academic accommodations are encouraged to contact an Equity Advisor in Equity Services to complete a letter of accommodation. The student must then make an appointment to discuss her needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.

## **Academic Integrity**

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another's ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized cooperation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated. Penalties may include; a grade of Failure on the submitted work and/or course; academic probation; a refusal of permission to continue or to register in a specific degree program; suspension from full-time studies; suspension from all studies at Carleton; expulsion from Carleton, amongst others. Students are expected to familiarize themselves with and follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at: <a href="https://carleton.ca/registrar/academic-integrity/">https://carleton.ca/registrar/academic-integrity/</a>.

## **Sprott Student Services**

The Sprott student services office, located in 710 Dunton Tower, offers academic advising, study skills advising, and overall academic success support. If you are having a difficult time with this course or others, or just need some guidance on how to successfully complete your Sprott degree, please drop in any weekday between 8:30am and 4:30pm. Our advisors are happy to discuss grades, course selection, tutoring, concentrations, and will ensure that you get connected with the resources you need to succeed! <a href="http://sprott.carleton.ca/students/undergraduate/learning-support/">http://sprott.carleton.ca/students/undergraduate/learning-support/</a>

## **Centre for Student Academic Support**

The Centre for Student Academic Support (CSAS) is a centralized collection of learning support services designed to help students achieve their goals and improve their learning both inside and outside the classroom. CSAS offers academic assistance with course content, academic writing and skills development. Visit CSAS on the 4th floor of MacOdrum Library or online at: carleton.ca/csas.

#### **Important Information:**

- Students must always retain a hard copy of all work that is submitted.
- All final grades are subject to the Dean's approval.

- For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, in order to respond to your inquiries, please send all email from your Carleton CMail account. If you do not have or have yet to activate this account, you may wish to do so by visiting http://carleton.ca/ccs/students/

# Important Dates and Deadlines – Winter 2018 Graduate, Undergraduate and Special Students

## January 2

University reopens at 8:30 a.m.

## January 8

Winter term classes begin.

## January 12

OSAP deferral deadline. <u>Late payment charges and late registration charges</u> applied to the student account on or after this date for eligible OSAP students.

## January 19

Last day for registration for winter term courses.

Last day to change courses or sections (including auditing) for winter term courses.

Graduate students who have not electronically submitted their final thesis copy to the Faculty of Graduate and Postdoctoral Affairs will not be eligible to graduate in Winter 2018 and must register for the Winter 2018 term.

## January 19-21, 26-28

Fall-term deferred examinations will be held.

## January 31

Last day for a <u>fee adjustment</u> when withdrawing from Winter term courses or the Winter portion of two-term courses (financial withdrawal). Withdrawals after this date will create no financial change to Winter term fees and will result in a grade(s) of WDN appearing on your official transcript.

## February 16

April examination schedule available online.

#### February 19

Statutory holiday, University closed.

## February 19-23

Winter Break. Classes are suspended.

#### March 1

Last day for receipt of applications from potential spring (June) graduates.

Last day for receipt of applications for admission to an undergraduate program for the summer term.

#### March 9

Last day to request formal exam accommodations for April examinations to the Paul Menton Centre for Students with Disabilities. Late requests will be considered on case-by-case basis.

#### Date TBA

<u>Last day to pay any remaining balance on your Student Account</u> to avoid a hold on access to marks through Carleton Central and the release of transcripts and other official documents. An account balance may delay Summer 2018 course selection.

## March 27

Last day for summative or final examinations in winter term or fall/winter courses before the official examination period (see <u>Examination Regulations</u> in the Academic Regulations of the University section of the Undergraduate Calendar).

#### March 30

Statutory holiday, University closed.

## April 7

<u>Last day to pay any remaining balance on your Student Account</u> to avoid a hold on access to marks through Carleton Central and the release of transcripts and other official documents.

## April 11

Winter term ends.

Last day of fall/winter and winter-term classes.

Classes follow a Friday schedule

Last day for academic withdrawal from fall/winter and winter term courses.

Last day for handing in term work and the last day that can be specified by a course instructor as a due date for term work for fall/winter and winter-term courses.

## **April 12-13**

No classes or examinations take place.

## **April 14-26**

Final examinations in winter term and fall/winter courses may be held. Examinations are normally held all 7 days of the week.

## April 26

All take home examinations are due on this day.

## **May 11**

Graduate students who have not electronically submitted their final thesis copy to the Faculty of Graduate and Postdoctoral Affairs will not be eligible to graduate in Spring 2018 and must register for the Summer 2018 term.

## May 18-29

Fall/winter and winter term deferred final examinations will be held.