

COP2512 – IT Programming Fundamentals

Spring 2016 Syllabus

Foreword – Advice to succeed in this course;

I thought I would start the syllabus with something that should benefit a large number of students. The following advice is based on figuring out the most common hindrances previous fellow students have had to overcome to succeed. Feel free to drop me an email and meet, online or on-campus, at any time to discuss how you're doing in the course. I'll always be glad to help you out with the non-technical stuff too; i.e. how to organize your learning strategy so as to be most efficient.

- Work **several times over the week**, not just a bunch of hours in one shot
- **Practice hands-on**, a lot! Programming is a skill not just knowledge that may be memorized.
- **Do not feel bad for making mistakes during practice**. The point is for you to make them during practice so you don't make them at the exams ☺
- Programming is an iterative refinement process, making mistakes is part of it **as long as you learn from your mistakes**. In other words; do not simply "get it to work" without understanding what you did wrong
- Ask **as many questions as you need** to improve your skills and knowledge, talk to your instructor early and often. Online course does not mean you should work alone
- Do not mistake an online course for a simpler version of a course; this one in particular requires lots of work and therefore lots of your time. **Make time for learning and for meeting with your instructor** if you need help.

I hope all of you enjoy learning programming, it is an incredibly creative part of IT and the efforts you put into learning it will pay off during your entire career. Welcome to IT Programming Fundamentals! ☺

1. Instructor Information

Name	Alessio Gaspar
Website	http://cereal.forest.usf.edu/alessio
Email	alessio@usf.edu

Canvas Forums

- Use for personal / private questions, or questions about anything graded. The Canvas forums are where you should post anything else.
- If you don't hear from me within 24 business hours, please re-send your email or post in the **support forum** to report the potential issue.
- Use only your USF email address so that you are not spam-filtered
- Do **not** email me at alessio@mail.usf.edu it will not reach me
- This course uses forums for you to post questions related to the study material, non-graded practice assignments, deadlines, or report technical problems you are having.
- Use these exclusively for questions about **non-graded** assignments.
- The instructor checks these on a daily basis during week days and is subscribed to the **support forum** in order to provide fast response.
- Refer to announcements and website for details on the role of each forum and the rules for using them.

Canvas Messages

- Do **not** message your instructor by replying directly to Canvas announcements or feedback messages from the gradebook.
- When you do so, notifications to the instructor are delayed and often lost in a rather obscure activity log. This makes this way of communicating unreliable at best.
- Instead, please email your instructor at alessio@usf.edu if you have any questions about grades or announcements

Address

ENB343E
Department of Computer Science & Engineering
University of South Florida, 4202 Fowler Avenue
Tampa, FL, 33620-9951

Phone

813 974-2932

Office Hours

- The best way to get in touch with me reliably and fast is **by emails**
- All office hours require you to make an appointment at least 24 business hours ahead. These are not walk-in.
 - You will have to book a time-slot to meet with your instructor by using the Canvas Calendar → Scheduler. Simply click on the desired meeting time slot and provide a brief summary of what you want to discuss.
 - Office hours will be available both on campus, ENB343E, and online using the link found in the Blackboard Collaborate section.
 - Contact help@usf.edu to inquire about preparing your machine for a “blackboard collaborate” meeting beforehand if you need to.

Teaching Assistant

- The TAs will also hold weekly office hours to assist you
- To Be Announced

2. Course Information

Prefix COP

Number 2512

Section 701

College EN

Department EIT

CRN 23247

Title IT Programming Fundamentals

Delivery Method

- This course is delivered using an Online Asynchronous modality. This means that there are no mandatory, weekly scheduled, “live” meetings in person or online.
- This format is meant to offer flexibility to students who seek an online course to fit their professional schedule. However, the instructor and Teaching Assistants are available to help you via online or on-campus meetings, by responding to questions posted on forums, and by responding to emails. Please make sure to use these resources to get help early on.
- We also progress through the material all together, with deadlines

every week. This is meant to prevent anyone from “falling behind” as this happens very easily in these online courses. **Every Monday** by 11:55PM the material for the new week will be announced & made available. Make sure you start working on this material early in the week and often; this is the best way to be successful in a programming course.

Course Meeting Times & Location n/a – see above

Required Textbook Introduction to Java Programming, Brief Version, 10E. Daniel Liang.

Pre-requisites n/a

Description An examination of computer programming using a modern high-level language with a focus on applications to Information Technology.

Course Objectives On successful completion of this course, students will be able to;

- 1) Understand basic concepts of programming and their relevance to the IT professional
- 2) Use branching instructions and decision patterns,
- 3) Use iterative instructions and iteration patterns,
- 4) Apply structured design methods to design modest programs,
- 5) Use arrays and implement related algorithms,
- 6) Debug and test programs

Learning Outcomes Achievement of the above objectives will be measured by a student's ability to;

- 1) Write programs in a modern programming language to solve an IT-related problems while demonstrating an understanding of correct syntax, semantics, primitive data types, and operations on primitive data types.
- 2) Write a program in a modern programming language that uses branching instructions to solve an IT-related problem
- 3) Write a program in a modern programming language that uses iterative instructions to solve an IT-related problem
- 4) Write a program in a modern programming language by using structured design principles to solve an IT-related problem.
- 5) Write a program in a modern programming language that uses arrays to solve an IT-related problem
- 6) Debug and test programs to find both design and implementation errors

Availability of Course Material, announcements and assignments This course is delivered to you using the following resources;

CANVAS SITE

- This course should be listed when you login to Canvas.
- We will use the Canvas site to communicate via forums, via Blackboard Collaborate, submit assignments or exams, take quizzes...
- The details on the specific activities that we will use Canvas for will be provided to you by your instructor during the semester

WEBSITE

- In addition to the above, we will also use a web site to give you access

to material such as videos, PDF files, Links...

- You will find this material at <http://cereal.forest.usf.edu/edu/COP2512/>

Tentative Schedule The following is a tentative timeline which might be modified during the semester.

Week #	Begins on	Module #	Lecture Topic	GQ	PA
1	1/11		Getting Started	special	
2	1/18	101	Introduction with Raptor	GQ-101	
3	1/25	102		GQ-102	
4	2/1	103		GQ-103	
5	2/8	Midterm #1			
6	2/15	201	Introduction with Java	GQ-201	P201
7	2/22	202		GQ-202	P202
8	2/29	203		GQ-203	P203
9	3/7	Midterm #2			
	3/14	Spring Break Week			
10	3/21	301	Java Methods	GQ-301	P301
11	3/28	302	Java 1D Arrays	GQ-302	P302
12	4/4	303	Java 2D Arrays	GQ-303	P303
13	4/11	304	Java Objects	GQ-304	P304
14	4/18	305	Java OOP	GQ-305	
15	4/25	Review	Review Week		
16	5/2	Final	Due 5/6/2016		

Legend	Week #	Week's number in the semester. Please note that we skip spring break week.
	Begins on	Date of the Monday starting this specific week.
	Module #	Self-Explanatory
	Lecture Topics	Self-Explanatory
	GQ	Graded Quizzes. See syllabus for first week quiz being used to take first day attendance
	PA	Practice Assignments

3. Assessment of Student Outcomes

Grading Criteria and/or Scale: Grades will be on this scale
(no final rounding up, 69 IS 69 and not 70)

100-90	A	4.0
80-89	B	3.0
70-79	C	2.0
60-69	D	1.0

Evaluation Items

Item	Weight % of final grade
Graded Quizzes	25%
Midterm Exams	25%
Final Exam	25%
Participation to Practice Assignments	25%
Total Points Available	100%

Graded Quizzes - They will be administrated using Canvas and will allow students to

evaluate their basic understanding of the study material.

- Any questions about graded quizzes may only be addressed to your instructor by email, or when meeting with him online or on-campus.
- You are allowed to take the quiz a single time and need to complete it in one shot during the allotted time.
- If you experience a technical difficulty, email your instructor immediately with documentation of the problem you encountered. Under specific documented situations your attempt will be cleared and you will be allowed to retake the quiz. However, you need to understand that this is exceptional and only for situations which may be documented.
 - The instructor is not required to grant you another attempt because you clicked on the wrong button.
 - It is your responsibility to have a fast and reliable internet connection when enrolling in an online offering which will rely on internet to provide you with material, communication and assess your performance.
- Such extra attempts might be granted only if you emailed verifiable documentation on what happened right when the problem happened.
- Such extra attempts won't be granted as extension to the deadline. E.g. if you take the quiz 3 hours before the deadline, bump into a problem, email your instructor, get a response 2 hours later, then you have only 1 hour left
- Such requests will be processed as time permit. Sending an email at 9pm the day of the deadline will most likely result in a response the next day, too late to grant another attempt.
- Some modules will allow you to earn credit for completing practice exercises. We will use different software tools to allow you to engage in this kind of practice and receive immediate feedback.
- The specifics of the software used this semester will be provided on the course website in the "Welcome Aboard" → "Software" section
- You must ensure, **by the end of the first week**, that your computer allows you to engage in these practice activities.
- Details on what you need to submit to prove that you completed each practice activity will be provided during the semester by your instructor

Practice Assignments

Midterm Exams

We will have two open book, time-limited, online proctored **midterms** exams;

- These will be administered online using Canvas and will require you to be able to work with the software used in this course.
- They will also be proctored using USF online proctoring software. Please see the **USF Policy on online proctoring** in the next section for software / hardware / policy requirements
- If you have any question about these, you are only allowed to discuss them with your instructor or the TA. The work you submit to be graded must be only the result of your personal work

Please note that the settings of our online proctored exams will require you to;

- Own a webcam and microphone compatible with the USF *Proctorio* software – you will have an opportunity to test things using our “Fake Exam” in Canvas before the first midterm
- Be ready to show to your webcam a valid ID; i.e. either driver license or USF Student ID
- Access Canvas using the Google Chrome web browser which is the only one compatible with the *Proctorio* plugin you will have to install
- Work on a single monitor while you take the exam; disconnect any secondary monitor
- Do not communicate with anyone, physically or online, while taking the exam. Sound, video, and screen activities will be monitored in order to flag any suspicious behavior

Final Exam

We will have one open book, time-limited, in-person proctored final exam which date will be communicated to students during the semester;

- This final exam will have to be taken on-campus and will be proctored.
- Please see the **USF on-campus proctoring** policies in the next section for details
- Depending on the course, your instructor might require you to take this in-person exam "on paper", using the Canvas Learning Management System, using software otherwise required by the syllabus, or a combination of the above.

The following will result in receiving zero points to the final and thus potentially fail the course;

1. Inability to be physically present at least 10 minutes before the dates, times and location which will be communicated to you by the instructor during the semester.
2. Inability to provide the proctor with your valid and original driver license or USF student card.
3. Inability for the proctor to confirm unambiguously your identity based on the photo used for your driver license or USF student card.
4. Inability to take the exam due to lack of proper equipment; e.g. it is your responsibility to ensure that you **own and bring a laptop allowing you to perform all required exams tasks**
5. Communicating in any way during the exam with anyone besides the proctor
6. Using resources not explicitly allowed for this exam by the instructor and in writing in the exams' instructions; e.g. google, software, hardware...

Extra Points

Extra points are not available every semester and are assigned at the discretion of the instructor to reward students who have shown outstanding contributions. Sometimes, end of semester surveys are made available & participation is rewarded with a few points. Regardless, plan on passing without any extra points.

4. USF Policies

While advisors, directors, department chairs and administration are available to assist students in meeting academic regulations, policies and procedures, it is ultimately the student's responsibility to be acquainted with all academic regulations, policies and procedures, and to meet all requirements.

You are therefore referred to the following resources which detail the various USF Policies about which you should be knowledgeable before to enroll in any course;

- USF Undergraduate Catalog for the current academic year
 - <http://www.ugs.usf.edu/catalogs.htm>
 - Standard Policies [http:// www.ugs.usf.edu/ugc/standard_policies.htm/](http://www.ugs.usf.edu/ugc/standard_policies.htm/)
 - Academic Policies and Procedures sections <http://ugs.usf.edu/pdf/cat1516/08ACADEMICPOL.pdf>
- USF Undergraduate Studies website
 - <http://www.usf.edu/undergrad/>
 - List of regulations for undergraduate policies at <http://www.usf.edu/undergrad/faculty/policies.aspx>
- USF Office of Student Rights & Responsibilities <http://www.sa.usf.edu/srr>
 - Student Code of Conduct <http://regulationspolicies.usf.edu/regulations/pdfs/regulation-usf6.0021.pdf>
- USF Students with Disabilities Services
 - <http://www.usf.edu/student-affairs/student-disabilities-services/>

We provide, in the remainder of this section, additional notes supplementing the above resources. The other sections of this syllabus also supplement these resources with additional instructor- and course-specifics policies.

Academic Support & Accommodations for Students with Disabilities

- Students in need of academic accommodations for a disability may consult with Students with Disabilities Services to arrange appropriate accommodations.
- Students are required to give reasonable notice prior to requesting an accommodation.

Student Code of Conduct

The University of South Florida values a community based on the principles of integrity, civility, and respect. As such, the USFP community expects students to behave in a manner that supports these principles. The Student Code of Conduct is a document which describes behavior that is counteractive to these principles and how the university will hold students accountable to those inappropriate behaviors.

University Emergency Policy

In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Blackboard, Elluminate, Skype, and email messaging and/or an alternate schedule. It's the responsibility of the student to monitor Blackboard site for each class for course specific communication, and the main USF, College, and department websites, emails, and MoBull messages for important general information.

Online Proctoring

All students must review the syllabus and the requirements including the online terms and video testing requirements to determine if they wish to

remain in the course. Enrollment in the course is an agreement to abide by and accept all terms. Any student may elect to drop or withdraw from this course before the end of the drop/add period.

Online exams and quizzes within this course may require online proctoring. Therefore, students will be required to have a webcam (USB or internal) with a microphone when taking an exam or quiz. Students understand that this remote recording device is purchased and controlled by the student and that recordings from any private residence must be done with the permission of any person residing in the residence. To avoid any concerns in this regard, students should select private spaces for the testing. The University library and other academic sites at the University offer secure private settings for recordings and students with concerns may discuss location of an appropriate space for the recordings with their instructor or advisor. Students must ensure that any recordings do not invade any third party privacy rights and accept all responsibility and liability for violations of any third party privacy concerns. Setup information will be provided prior to taking the proctored exam. For additional information about online proctoring you can visit the online proctoring student FAQ. <http://www.usf.edu/innovative-education/resources/student-services/online-proctoring.aspx>

On-campus Exams

This online asynchronous course may feature some examination that require students to take an exam on campus.

- Please make sure that you remain enrolled in this course only if you will be physically able to take the designated exams on campus at the set day and time.
- Similarly, you will be required to bring your laptop to take the exam on campus. You need to ensure that your hardware and software will allow you to access the USF wireless network on campus if the exam requires you to do so.
- You also need to be ready to present a valid identification to the campus proctors to assess your identity.
- The exact date and location of the final exam will be communicated to you during the semester by your instructor

5. Additional Course-Specific First Day Attendance Policy

Due to this course being delivered in an online asynchronous way, first day attendance will be taken using a **First Week Quiz**. The latter will be available on the Canvas site for this offering **until the Friday of the first week at 11:55am**. By then, you will have to have not only taken it to completion, but also achieved 100% of the available points for this quiz. Failure to do so will result in you being marked “absent” on the first day attendance Canvas tool.

Important remarks;

- The quiz only features questions which are meant to allow you to certify that you complied with all requirements for the first week. Therefore, **achieving 100% score is easy** if you start working early in the week.
- You are able to **take this quiz multiple times**, unlike the other graded quizzes we will be using this semester. So you might take it, learn from your mistakes; take it again until you score the

required 100% on it. Make sure you do this before the deadline

- You may verify whether you got this quiz right by looking at its gradebook entry and make sure you got all the available points
- If you decide to drop from the offering, you still need to work with the registrar on ensuring you are properly dropped. Simply not taking the quiz or scoring less than 100% of the available points does not wave other required procedures for you to drop.

6. Additional Course-specific Technology Requirements

Ground Rules

The following are not suggestions but **requirements** which you need to meet by the time you certify meeting them in our first week quiz.

- Failure to meeting the requirements, or certifying that you meet them in the first week quiz, will result in you being marked as “absent” for first day attendance purposes
- If at any point during the semester, the instructor establishes that you failed to meet these requirements and did not disclose it or drop the course, you will be asked to drop the course without further support.
- You are responsible to ensure you meet all these requirements – see technical support below for available resources

Technical Support

If you encounter technology-related problems, immediately contact help@usf.edu for support and copy your instructor to the original email request.

Laptop Requirements

You must own a laptop to work in this course;

- It must allow you to access the USF Tampa Campus wireless network
- It must run Windows 8 or 8.1 and the complete Microsoft suite of office software.
- It must allow you to run efficiently the course software that you will be required to install and test during the first week; refer to instructor announcements and other material made available to you during the first week.
- You must be able to bring this laptop to use during proctored, in-person exams, along with its power supply and necessary electrical cords.
- In order to be able to take online proctored examinations, you will also need a webcam and microphone
- In order to be able to engage in online live sessions, you will also be required to use a microphone and headset

Internet Access

In order to participate in an online course, you need the following;

- Reliable internet connection preventing you from being dropped during online activities, and receive zero points for them if they are graded
- Fast internet connection allowing you to meet your instructor or other students using Blackboard Collaborate
- Internet browser and plugins necessary to run Blackboard Collaborate, Canvas, and other software used in this online course

Software Requirements

This course will be using specific software tailored to the needs of this offering

- Details on where to download the software and how to install it will be provided during the first week
- Usage of this specific software in the course is mandatory for all course activities. A grade of 0 will be assigned to any submission developed using another environment
- You must ensure that your software is working properly by the end of the first week or drop this offering
- The instructor is *not* responsible for adapting the software to the specifics of your personal computer. Requests to do so will be ignored and won't constitute a substitute to the above

USF NetID

- You must have a USF Student ID in order to sign up for your USF NetID that is required for access to the Learning Management System.

USF Email

- E-mail: Every enrolled USF student receives an official USF e-mail account that ends with "mail.usf.edu." Every official USF correspondence to students is sent to that account. Students should go to the USF Information Technology website for "New User" information at <http://www.it.usf.edu>

Technical Issues

This is an online offering, we are using technology. Technology is not 100% reliable. Do not wait the last minute to submit an assignment. Make sure you schedule your work to be able to recover from last minute technical difficulties. Failing to do so puts the responsibility in your camp, not the instructor's, not the LMS team's, not the "internet".

- Make sure you verify the contents of the files you're about to upload for an assignment BEFORE to upload them.
- Make sure that you know how to submit assignment via the LMS before to take this offering.
- You will not be granted extra delays to resubmit if you encounter a technical problem which cannot be documented, e.g.
 - o ISP "phantom" outage / Mysterious PC failure / Lost emails
 - o "I submitted it in blackboard but you didn't get it"
 - o ...

It is therefore recommended that you submit early and carefully. Emails should be used only for personal inquiries and you should follow up if you do not get a response within 24 business hours. Backup your files at home and do not wait to take an online exam during unfavorable weather.

Canvas

- Students are expected to already know how to use the Learning Management System deployed at USF before to enroll in this offering.
- If you are unsure as to what this entails, contact immediately the USF help desk at help@usf.edu to receive training.
- Last minute technical issues due to a lack of preparedness won't constitute a valid excuse.

7. Additional Instructor-Specific Policies

Instructor's Right to Modify the Course Syllabus.

As the instructor of record for this course, I reserve the right to modify the course syllabus at any time during the semester to address changes needed in content, course resources, assignments, due dates, etc.

Expectations in students' communications

Use your USF official email address to send emails and make sure you refer the offering you are enrolled in along with the context of your question; e.g. "I am taking COP3515 IT Program Design and I have problems with quiz 302-Q, question #4". Emails which fail to provide this information might take much longer before they are processed

- Be polite and respectful to your interlocutor at all times, regardless of their rank; e.g. student, TA, tutor, instructor...
- Insults, sarcasm, excessive punctuation marks or other violations of netiquette will not be tolerated. Students sending such emails will be subject to USF policies on Academic Disruption.
- At the very minimum, the student will be added to the instructor's email spam filter and remove from the course's Canvas site thus preventing him or her from further disrupting the teaching process.

Academic Dishonesty

You are expected to work independently on all graded activities. Every graded work is required to be personal work only. Using material authored by others (e.g. found on the web, previous students, knowledgeable friends...) or seeking other peoples' advices besides the instructor is considered cheating.

- Any question about graded assignments can be only asked to your instructor.
- Any form of cheating or plagiarism will be sanctioned by a 'FF' grade for all party involved.
- Being unable to explain any aspect of the material you submitted to be graded as your own work will be considered the result of cheating and will be sanctioned the same way.
- The instructor reserves every right to use any possible mean to assert if a given student cheated or not. This may include, but is not limited to, (automatic) comparisons to other sources, questioning student(s), etc.

Grading, Grading Criteria and/or Scale

- No late assignments will be accepted. You are responsible for attempting your submissions ahead of time enough to allow you to seek help should a technical issue occur.
- No credit nor make-up for missed exams, quizzes or assignments
- Serious situations will be considered as exceptions to the above only with justifications (e.g. police, medical reports, etc) which will be investigated.
- There will be no "pre-grading" nor "proof-reading" of work you are expected to submit later as part of a graded learning activity. You will have opportunities to get feedback on practice assignments.
- If there is a conflict with my final examination and another course exam you have, please let me know as soon as possible so that we can schedule a make-up exam for you.

Grades Errors

Errors in grading are considered errors when the students is able to provide irrefutable evidence that his or her solution is [1] working and [2] in line with the requirements.

- Subjective considerations will not be taken into consideration nor will errors from the student in interpreting the requirements. Being able to interpret instructions correctly is an ability which is also measured as part of a learner or an IT Professional's evaluation.
- Errors in grading must be reported in detail to the instructor, by email within 48 hours. However, the instructor's subsequent decision on the matter will be final. Further communications on that issue will be ignored. Grading is *not* a negotiation, any more than your future boss' judgment of your work's quality is.

Gradebook Usage

- Students are expected to monitor their gradebook daily.
- Students are expected to read the feedback on every grade as they are released. Questions should be emailed to your instructor only within 48 hours of the grades release.

Other

- Staying registered beyond the first week implies acceptance of this syllabus' terms.
- Anything not explicitly authorized in writing by the instructor, i.e. syllabus / announcements / emails / instructions, is considered disruptive or unethical behavior from students. If in doubt, you are expected to email your instructor to verify the appropriateness of a given behavior prior to engage in it.
- If a given communication from your instructor contradicts another, it is your responsibility to email your instructor to verify which policy is appropriate.
- Please make sure that you turn off your cellular phone during scheduled class meetings (online or face-to-face) and do not use your computer for non-course related purposes when engaged in live online sessions.