

# Syllabus

## Course Information

Course Number: CSCE 314  
Course Title: Programming Languages  
Section: 598-599  
Time: ONLINE  
Location: ONLINE  
Credit Hours: 3

## Instructor Details

Instructor: Prof. S. Lupoli  
Office: <https://tamu.zoom.us/my/professorlupoli>  
Phone: 979-845-2479 (worst way to contact me)  
E-Mail: [slupoli@cse.tamu.edu](mailto:slupoli@cse.tamu.edu) **PLEASE: always put a Re: of "CSCE 314"**  
Office Hours: W 1-3pm, F 9-10am

Teaching Assistant: Fatma Elsheimy  
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Office Hours: MW 9am-11am

## Course Description

This course explores the design space of programming languages via an in-depth study of two programming languages, one functional and one object-oriented; it focuses on idiomatic uses of each language, and on features characteristic for each language.

## Course Prerequisites

Prerequisites (from the catalog): CSCE 221 or concurrent enrollment; junior or senior classification or approval of instructor.

## Course Learning Outcomes

At the end of the course, students will be able to use modern programming languages more effectively and be able to learn new programming languages more easily. They will get a broader understanding of language constructs, common abstraction mechanisms, and efficiency considerations.

## Textbook and/or Resource Materials

### Suggested textbook

Ken Arnold, James Gosling, and David Holmes, The Java Programming Language, 4th Ed., Addison-Wesley Professional.  
ISBN-13: 978-0-321-34980-4. ISBN-10: 0-321-34980-6.

## Grading Policy

### Attendance:

The student's semester grades will be based on lab assignments, exams, and projects. Class attendance is essential for student and group success; therefore students are required to promptly and regularly attend all their lab sessions (since this is an online class). A record of attendance will be maintained from the first day of classes and/or the first day the students' name appears on the roster through the final examinations and labs.

Absences may only be excused by the Texas A&M University Student Rules available at <http://student-rules.tamu.edu/rule07>. Prior arrangements with the instructor must be made when feasible and official verification of circumstances necessitating the absence will be required.

Absences related to Title IX of the Education Amendments of 1972 may necessitate a period of more than 30 days for make-up work, and the timeframe for make-up work should be agreed upon by the student and instructor" ([Student Rule 7, Section 7.4.1](#)).

### Make-Up Policies:

Make-ups or early/delayed due requests for assignments, quizzes, and exams will be given only under circumstances beyond student's control (a university sanctioned excuse). **Going on a trip or flying out early is not a university sanctioned excuse and a make-up will be denied.** "The instructor is under no obligation to provide an opportunity for the student to make up work missed because of an unexcused absence" ([Student Rule 7, Section 7.4.2](#)).

Also, if the assignment ***is a project***, and a delay is requested ***for any reason***, the work currently done must also be submitted at the time of the request. Since projects in this class are given weeks (even months) in advance, you should have completed some work on the project. A make-up for the project will be denied if there is a failure to produce significant work. Any make-up work must be completed before the solutions are posted or the graded results become available to the students, whichever occurs first. And students who request an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. (See [Student Rule 24](#).)

### Submission of Work, Deadline Policy, and Late Submission Policy:

All assignments must be submitted **electronically** (not hard copies) using the Canvas system by the due date and time specified in the assignment. Accepting electronic submission of homework and project reports documents establishes the date and time of submission thus avoiding future contests. **E-mail submissions will not be accepted** (they will be ignored without notice).

**Late submission or wrong submission** beyond the deadline will receive a 0, unless a University sanctioned excuse is provided ahead of time. In general, late submission will NOT be accepted. "I forgot" or "my file was corrupted" ***is not*** an excuse. For this particular class, no late work is accepted unless with a valid absence described above.

**Regrading Policy:**

A student can request regrading of any graded material, if the student believes that the points assigned are inconsistent with the quality and merits of the submitted work. To request regrading the student needs to follow the guidelines below:

1. Regrading requests must be submitted to the instructor within **one week** after the graded item has been returned (in hardcopy or electronically via eCampus) to the student. After this time limit no re-grading requests will be honored.
2. Regrading requests must be in written form, accompanied by a reasonable amount of specific justification and documentation.

**Class Participation and Labs:**

You will be working in teams of three. You will work with your teammate to complete weekly labs that can be completed from Friday 9am CST to Sunday 11:59pm CST. If no issues appear and attend fully, you will receive full credit. But if issues in work, attendance, etc... do happen, please contact your instructor IMMEDIATELY and here is how the grade will be affected:

1 <sup>st</sup> Documented Incident	No deduction
2 <sup>nd</sup> Documented Incident	25% deduction (but still up to instructor)
3 <sup>rd</sup> Documented Incident	50% deduction, move to another team (but still up to instructor)
or more	100% deduction

**CampusWire is another aspect of class participation.** CampusWire will be used for the course. It will be broken down into each topic/assignment/etc... that we have in this course. While posting is highly suggested for all questions since we all see it, answering with tangible solutions will earn extra credit throughout the course. Please make sure responses are thoughtful and respectful. *Answering questions* from fellow classmates throughout the semester will be used as a part of your participation grade.

The class will use an 80/20 split for lab work participation and CampusWire participation. I stopped recording your activity on CampusWire in the last week of the course. (Some like to suddenly make-up for the lack of participation)

If no teamwork issues were reported, you get the first 80%. If the total number of your asked and answered questions (ask + answer) on CampusWire is greater than or equal to 15, you get the 20%. Otherwise, you will get a proportional grade. Say, the number of questions you asked and answered is 3, you get  $3/15 * 20\% = 4\%$ .

**Quizzes:**

Quizzes will be timed and be of varying types of questions. The quiz is designed to be taken AFTER watching and reviewing all of the course material, but before your group lab. The quiz will be offered only on Thursdays from 9am to midnight.

**Exams:**

There are several exams in this course. If you choose to take the exam online, there are setup requirements explained [here](#) to stop cheating. In general, please make sure you have the camera angle facing the monitor, your keyboard and you in one frame. If this is not followed, you will receive a 0.

## Grading Scale:

*Standard Letter Grading Scale:*

A >= 90% > B >= 80% > C >= 70% > D >= 60% > F

	points	#	Total %
Project 1	15	1	15
Class Participation	6	1	6
Quizzes	1	12	12
Labs	3.33	12	40
Midterm	12	1	12
Final	15	1	15
		<b>Total:</b>	<b>100</b>

## Course Schedule

NOTE: Course assignments may be modified by the instructor to meet the needs of the class. A live calendar will be contained on our class learning management system. (Blackboard/Canvas)

### Topic

Introduction, Function Language Choice Introduction and Basics  
Types, Currying, and Polymorphism; Defining Functions, Recursive Functions  
List Comprehensions  
Higher-order Functions; Declaring Types and Classes, Modules  
Declaring Types and Classes, Modules; A Tour of Language Implementation  
Grammars and Parse Trees  
Syntactic Analysis; Name Scope and Type Systems  
Functors, Applicatives, and **MIDTERM**  
Monads and Monadic Parsing (Parsing library)  
Intro to Java  
Java Classes, Subclasses, Packaging and Subtyping  
Java Polymorphism  
Java Generics I & II  
Java Virtual Machine (JVM)  
Final review (Cont.)

### Important Dates:

**Midterm 1 - (1.5 hours) - 3/24 at 6pm (CST)**

**Final Exam - (2 hours) - 5/5 at 6pm (CST)**

**A Face to Face and(or) Online option may be made available to you. Ask about it!!**

## Academic Integrity Statement and Policy

"An Aggie does not lie, cheat or steal, or tolerate those who do."

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, may be sufficient grounds to initiate an academic misconduct case" ([Section 20.1.2.3, Student Rule 20](#)).

You can learn more about the Aggie Honor System Office Rules and Procedures, academic integrity, and your rights and responsibilities at [aggiehonor.tamu.edu](http://aggiehonor.tamu.edu).

*In this course there are both assignments that will be done individually and as a group.* Note the following acceptable/unacceptable collaborations: Acceptable collaboration in ***individual assignments*** includes: (1) discussing the assigned problems to understand their meaning or (2) discussing possible approaches to assigned problems. However, you must explicitly acknowledge any help received from someone and reference every source you use, whether it is a person, a book, a paper, a solution set, a web page or whatever. Unacceptable collaboration includes: (1) copying (verbatim use) of physical papers or computer files (including program files), (2) submission of solutions that are jointly authored, or authored either wholly or in part by other individual, or (3) providing physical papers or computer files (including program files) of your (or third-party) solutions to other individuals.

In general, the strategy and approach of solutions may be discussed together but all actual solutions must be constructed and written up by the student herself/himself, and the final product must not be shared in any way. You should make sure all of your files are properly secured since you may be responsible if someone copies your files. Should questions arise during the course of working on a problem, immediately contact the instructor either by telephone, email, or by an office visit.

## Americans with Disabilities Act (ADA) Policy

Texas A&M University is committed to providing equitable access to learning opportunities for all students. If you experience barriers to your education due to a disability or think you may have a disability, please contact Disability Resources in the Student Services Building or at (979) 845-1637 or visit [disability.tamu.edu](http://disability.tamu.edu). Disabilities may include, but are not limited to attentional, learning, mental health, sensory, physical, or chronic health conditions. All students are encouraged to discuss their disability related needs with Disability Resources and their instructors as soon as possible.

**NOTE:** *Faculty associated with the main campus in College Station should use this Americans with Disabilities Act Policy statement. Faculty not on the main campus should use the appropriate language and location at their site.*

## Title IX and Statement on Limits to Confidentiality

Texas A&M University is committed to fostering a learning environment that is safe and productive for all. University policies and federal and state laws prohibit gender-based discrimination and sexual harassment, including sexual assault, sexual exploitation, domestic violence, dating violence, and stalking.

With the exception of some medical and mental health providers, all university employees (including full and part-time faculty, staff, paid graduate assistants, student workers, etc.) are Mandatory Reporters and must report to the Title IX Office if the employee experiences, observes, or becomes aware of an incident that meets the following conditions (see [University Rule 08.01.01.M1](#)):

- The incident is reasonably believed to be discrimination or harassment.
- The incident is alleged to have been committed by or against a person who, at the time of the incident, was (1) a student enrolled at the University or (2) an employee of the University.

Mandatory Reporters must file a report regardless of how the information comes to their attention – including but not limited to face-to-face conversations, a written class assignment or paper, class discussion, email, text, or social media post. Although Mandatory Reporters must file a report, in most instances, you will be able to control how the report is handled, including whether or not to pursue a formal investigation. The University's goal is to make sure you are aware of the range of options available to you and to ensure access to the resources you need.

Students wishing to discuss concerns in a confidential setting are encouraged to make an appointment with [Counseling and Psychological Services](#) (CAPS).

Students can learn more about filing a report, accessing supportive resources, and navigating the Title IX investigation and resolution process on the University's [Title IX webpage](#).

**NOTE:** Faculty associated with the main campus in College Station should use this Title IX and Statement on Limits of Liability. Faculty not on the main campus should use the appropriate language and location at their site.

## Statement on Mental Health and Wellness

Texas A&M University recognizes that mental health and wellness are critical factors that influence a student's academic success and overall wellbeing. Students are encouraged to engage in proper self-care by utilizing the resources and services available from Counseling & Psychological Services (CAPS). Students who need someone to talk to can call the TAMU Helpline (979-845-2700) from 4:00 p.m. to 8:00 a.m. weekdays and 24 hours on weekends. 24-hour emergency help is also available through the National Suicide Prevention Hotline (800-273-8255) or at [suicidepreventionlifeline.org](https://suicidepreventionlifeline.org).

## COVID-19 Temporary Amendment to Minimum Syllabus Requirements

### *Campus Safety Measures*

To promote public safety and protect students, faculty, and staff during the coronavirus pandemic, Texas A&M University has adopted policies and practices for the Fall 2020 academic term to limit virus transmission. Students must observe the following practices while participating in face-to-face courses and course-related activities (office hours, help sessions, transitioning to and between classes, study spaces, academic services, etc.):

- Self-monitoring—Students should follow CDC recommendations for self-monitoring. **Students who have a fever or exhibit symptoms of COVID-19 should participate in class remotely and should not participate in face-to-face instruction.**
- Face Coverings—[Face coverings](#) (cloth face covering, surgical mask, etc.) must be properly worn in all non-private spaces including classrooms, teaching laboratories, common spaces such as lobbies and hallways, public study spaces, libraries, academic resource and support offices, and outdoor spaces where 6 feet of physical distancing is difficult to reliably maintain. Description of face coverings and additional guidance are provided in the [Face Covering policy](#) and [Frequently Asked Questions \(FAQ\)](#) available on the [Provost website](#).
- Physical Distancing—Physical distancing must be maintained between students, instructors, and others in course and course-related activities.
- Classroom Ingress/Egress—Students must follow marked pathways for entering and exiting classrooms and other teaching spaces. Leave classrooms promptly after course activities have concluded. Do not congregate in hallways and maintain 6-foot physical distancing when waiting to enter classrooms and other instructional spaces.
- To attend a face-to-face class, students must wear a face covering (or a face shield if they have an exemption letter). If a student refuses to wear a face covering, the instructor should ask the student to leave and join the class remotely. If the student does not leave the class, the faculty member should report that student to the [Student Conduct office](#) for sanctions. Additionally, the faculty member may choose to teach that day's class remotely for all students.

### *Personal Illness and Quarantine*

Students required to quarantine must participate in courses and course-related activities remotely and **must not attend face-to-face course activities**. Students should notify their instructors of the quarantine requirement. Students under quarantine are expected to participate in courses and complete graded work unless they have symptoms that are too severe to participate in course activities.

Students experiencing personal injury or illness that is too severe for the student to attend class qualify for an excused absence (See [Student Rule 7, Section 7.2.2.](#)) To receive an excused absence, students must comply with the documentation and notification guidelines outlined in Student Rule 7. While Student Rule 7, Section 7.3.2.1, indicates a medical confirmation note from the student's medical provider is preferred, **for Spring 2022 only, students may use the Explanatory Statement for Absence from Class form in lieu of a medical confirmation. Students must submit the Explanatory Statement for Absence from Class within two business days after the last date of absence.**