PR1500 Professional Development - System Programming I

Course Information

Delivery Method: Blended

Course Meeting Times/Days: Instructor(s) Available 8:30 AM - 4:30 PM, Monday - Friday
** Mandatory activities can be found in your Intranet schedule. Students will be notified at least 7 days in advance of any newly scheduled mandatory activities.*

Course Description

This course introduces System Programming students to the skills necessary for success within their field. This includes networking, presenting, and whiteboarding skills. They will also practice public speaking skills and the beginning of developing a professional persona through social media.

Course Objectives

Upon successful completion of this course, the student should be able to:

1) Deconstruct data structures commonly used in technical interviews.
2) Adapt general interviewing best practices to System Programming interviewing needs.
3) Simulate problems and solutions for colleagues and mock interviewers.
4) Model effective use of whiteboarding skills.

Course Prerequisite(s)

None

Credit Hours

3 Credit Hours

Instructional Materials, References, and Software Required

Atlas School Intranet (Learning Management System)
VIAS (Student Portal)
Online Publications and Journals
Occasional Meet-Ups
Occasional Guest Lecturers

	Recommended		Minimum	
	PC	**Mac**	**PC**	**PC**
Operating System	Windows 10, version 1903 or higher	Mac OS 10.13 or higher	Windows 10, version 1803 or higher	Mac OS 10.12 or higher
Processor	Intel or AMD with virtualization instruction support VT-x/AMD-V (Intel Core i5 and higher)			
Memory	16 GB		4 GB	
Free Disk Space	50 GB SSD		30 GB	
Additional Hardware	Wifi network adapter with WPA2 Enterprise support			
Internet Browser	The latest version of Google Chrome			

Instructional Methods

A variety of teaching strategies will be used to conduct this course. These may include but are not limited to group discussions, group exercises, workshops, projects, PLDs, mock interviews, and examinations.

If the course delivery method is Blended, PLDs, mock interviews, and other mandatory activities will require participation on campus. If the course delivery method is Online, PLDs, mock interviews, and other mandatory activities will require participation remotely.

Regardless of the course delivery method, there is a strong online component and students can expect to participate in group discussions, collaborative learning, exercises, and workshops online.

Research

Projects contain a research component that requires students to find, analyze, and/or retrieve information from relevant and applicable resources.

Assessment Criteria & Method of Evaluating Students

Method of Evaluation
This course is evaluated using multiple methods of assessment. Courses may be graded by projects, quizzes, professionalism, peer reviews, attendance, and practical evaluation of techniques.

Out-of-Class Time
Students are assigned projects to be completed as part of the course requirements. Atlas estimates a student will spend 70 hours working on these projects outside of class.

Mandatory Activities (Peer Learning Days, Coworking Days, etc.)
These are an important part of your education. If you miss one of these mandatory activities, you do not have the opportunity for makeup work and will lose all points for that activity. If for any reason you miss a mandatory activity, you are still responsible to know the material covered.

Attendance
Attendance is taken for all mandatory activities (Peer Learning Days, Coworking Days etc.). It is your responsibility to inform staff if you are unable to attend a mandatory activity.

You should plan to arrive early for mandatory activities. If you arrive late or leave early, you will be considered late and will lose points for the activity.

You are considered absent if you arrive 15 minutes after the start of a mandatory activity.

Students who are absent are encouraged to obtain notes from fellow students. Students are encouraged to meet with their instructors immediately following an absence.

ARA's
Academically Related Activities ("ARA"), are types of online substantive interactions that contribute to the student's overall academic goals. These are activities or assignments in the online portion of any course that can be measured by either completion or receiving a grade and will also be used as a measure of online attendance.

Professionalism
The Atlas learning environment is designed to prepare students for a professional work environment. As students, you are industry professionals so your behaviors and attitudes should reflect those that are expected in a work environment.

Here are the key elements of your professionalism at Atlas:

- *Show up to mandatory activities on time and do not leave early:* Consistently showing up late or leaving early is disruptive and disrespectful and not acceptable in a professional environment. Plan to show up early at every mandatory activity.
- *Meet the deadlines*: You will be informed of deadlines and due dates in advance via the Intranet and VIAS Student Portal. It is your responsibility to ensure that assignments are submitted on time.
    - If an emergency occurs, that interferes with submitting your work on time, communicate with your instructor as soon as possible. Also, expect that submitting an assignment late might negatively impact your grade.
- *Communication*: Communicate with industry professionals, school representatives, and your fellow students in a respectful and efficient manner.
- *Online Professionalism*: Participate regularly in a professional manner in all assigned online forums, slack channels, meet-ups, or other assigned elements.

Academic Honesty and Integrity

Atlas promotes the exchange of knowledge in an environment that encourages intellectual honesty. This applies to both the School's on-ground and online training environments. Students must maintain high standards of academic conduct. A student's conduct must not interfere with the learning process of any other student, the Educational Facilitator, or the progress of the class. Violation of the academic honesty and integrity standards may include all types of academic fraud, misrepresentation, or cheating, and engaging in any online acts that violate the End User Licensing Agreement.

A student found in violation of the Academic Honesty and Integrity policy will be subject to disciplinary action by the Education Facilitator, Director of Education or Executive Director.

Additional information may be found in the school's catalog under, "Academic Honesty and Integrity.

Academic Fraud

Academic Fraud is any type of cheating or misrepresentation that occurs in relation to online or on-ground classes. It can include:

· ***Plagiarism***: The adoption or reproduction of code, ideas, words, or statements of another person or author without due acknowledgment.

· ***Fabrication***: The falsification of data, information, or citations in any academic situation.

· ***Deception***: Providing false information to a representative of the college concerning an assignment, mock interview, or class – e.g., giving a false excuse for missing a deadline or falsely claiming to have submitted work.

· ***Cheating***: Any attempt to give or obtain assistance in any class assignment(s) (like an examination" without due acknowledgment.

· ***Sabotage***: Acting to prevent others from completing their work.

Students are required to submit original work on all graded academic work. Students must solve all programming assignments without the assistance of others or utilizing previously written code. To ensure that students are submitting original work, an application to detect and identify previously written code will be utilized. This application will be used on all final coursework submissions as well as randomly throughout the duration of the course. Students found utilizing plagiarized code will be subject to the school's Academic Honesty and Integrity policy's disciplinary actions, as identified in the school's catalog.

Grade Distribution

Course Activity	Percentage of Grade
Projects	80%
PLDs	20%
Total	**100%**

GRADING SCALE		
Letter Grade	**Numeric Grade**	**Indicates**
A	90.00-100	Excellent
B	80.00-89.99	Above Average
C	70.00-79.99	Average
D	60.00-69.99	Below Average
F	59.99 and below	Failure
I		Incomplete

** Grades are not rounded up for any reason. (i.e., If you earn an 89.9999 this grade will be truncated to 89.99 and will NOT be rounded up to 90.)*

Requirements for Successful Completion of the Course

At a minimum, students must achieve the following: a passing grade of D or above, and adherence to the school attendance policy.

It is the student's responsibility to seek the instructor's guidance at the time when a problem area is initially encountered, not after receiving an unsatisfactory grade. Arrangements for tutoring must be made with the appropriate educational staff, i.e., instructor or student success coordinator.

Course Schedule

Part 1
- Sorting Algorithms
- Best Self Narratives

Part 2
- Searching Algorithms

Part 3
- Binary Trees
- Social Media Networking Profiles

** Mandatory activities can be found in the Intranet (Learning Management System) and VIAS (Student Portal). Students will be notified at least 7 days in advance of any newly scheduled mandatory activities.*