

Perform simple Client/Server program networking.
 Be able to define simple aggregate variable data structures.
 Be familiar with String objects and functions for manipulating them.
 Reinforce understanding of conditional logic and control program flow.
 Reinforce knowledge of subprograms, data passing and result retrieval.
 Understand the use of Constructors.
 Have a basic understanding of OOP tenets of inheritance and encapsulation.
 Be able to write, compile and debug more advanced JAVA programs.
 Be more adept at converting human logic to machine logic.

Core Competencies: Know how to evaluate computer programming problems effectively, make informed choices based upon analysis of logic needed to be applied to generate effective solutions, integrate current information technology skills for programmatically solving information based problems.

Course Objectives: By the end of the course, the student will have learned:

Knowledge and Competencies

Be familiar with using multi-dimensional arrays of data.
 Understand the use of pointers, reference variables and functions.
 Write and compile more advanced JAVA programs.
 Be able to define simple aggregate variable data structures.
 Be familiar with String objects and functions for manipulating them.
 Be familiar with the concept of object classes, instance variables and methods.
 Performing data input and output operations on files.
 Be able to perform data input and output operations on files.
 Management of data in virtual storage.
 Reinforce understanding of conditional logic and control program flow.
 Reinforce knowledge of subprograms, data passing and result retrieval.
 Understand the use of Constructors and Destructors.
 Have a basic understanding of OOP tenets of Inheritance and Encapsulation.
 Understand the basic client/server paradigm using TCP sockets.

Performance

Be able to write, compile and debug more advanced programs.
 Be more adept at converting human logic to machine logic.
 Identify the main features and architecture of the JAVA platform.
 Master intermediate to advanced level programming topics.
 Demonstrate proficiency in object oriented programming.
 Describe and implement data abstraction in a final class project.

Affective

Develop an appreciation for the complex and detail nature of computer programming.

Attendance Policy:	Students are expected to attend all class sessions and are responsible for all material presented in class, all homework, labs and reading assignments. Grades are based on the quality of work completed in meeting the requirements for this course. If a student has more than 3 unexcused absences, his/her final grade will be lowered by 10 points. Excessive absence may be considered sufficient cause for dismissal from class. Missed work is the responsibility of the student to obtain the requirements from sources other than the instructor.
Lateness Policy:	The student must inform the instructor in advance if he/she will be late. If the student is late 3 times in excess of 30 mins, the lateness will count as an absence and you will be penalized for 1 class participation unit.
Classroom Participation:	A significant portion of your grade is based upon class participation. When lesson material is based on the text, students are to ignore their computer and take part in the learning process. No Internet surfing, text or instant messaging. When the lesson material is focused on hands-on learning, students are to be engaged in lessons as directed by the instructor. It is expected that you will participate enthusiastically and frequently in all class discussions and stay for the full class length. You will be penalized class participation units for using any electronic messaging during class.
Homework:	Reading will be assigned as well as questions relating to the covered topic. The homework is intended to reinforce the material presented in class and to prepare the student for in class discussions and examinations.
Work Submission:	All assignment materials and homework must be submitted via demonstration or electronically. Work and source-code must be checked for accuracy and be well-documented. All submitted labs must compile "Error and Warning free" and must successfully link-edit. You are expected to have tested and successfully executed your programming prior to submission. Submissions must include the name, email or ftp origin, date, course number and section. No printed submissions are accepted. If you do not receive a response to your emailed assignments you must assume that it did not reach me. Work is expected on or by the due dates. If you are missing deadlines then it is not likely that you will be successful in this course. Lab assignments are due two weeks after the lab has been assigned.
Required format research papers:	Any research papers written for this class must follow Modern Language Association (MLA) format. All submitted work should be checked for grammatical accuracy, spelling and composition. Emailed work must be in OpenOffice (.odt) or Office (.doc) format.
Other Student Expectations:	Communicate often with the instructor about any concerns or problems. Keep a notebook and take notes on the ideas, facts and concepts presented. Perform all reading assignments on time. Be prepared to discuss material in class. Put forth a maximum effort to learn and master the subject material with interest and persistence. Note that the class schedule is "tentative" and subject to change.

It is your responsibility to be aware of any changes made to the schedule.

Late Work Policy:	All projects and assignments are to be handed in on the designated due date. Be aware that late work will affect your grade. Work handed in late will be marked off 10 percent for every class session the assignment is late. Emailed assignments are acceptable when timestamped prior to date due. You will not be reminded or coaxed to complete and submit your work.
Missed Exam Policy:	Exams missed due to an excused absence must be made up within one week. Arrangements for make-up exams must be made between the instructor and the student prior to the regularly scheduled exam. Exams missed due to an unexcused absence cannot be made up and will receive a zero grade. Contact me in advance when you know that you will be missing any class session to avoid a penalty.
Data:	It is the student's responsibility to ensure that his/her work is backed up to and recoverable from reliable media. There is no warranty as to the security or the data on the school's computers or network. There will be no acceptable excuse for lost or inaccessible assignments. Your computer's integrity is your responsibility. Any problems with campus equipment, hardware or software must be directed to the IT department by the student.
Work Platform:	It is each student's responsibility to acquire, download and install a suitable development environment on their home based computers to allow them to complete class lab and course project requirements.
Cheating and Plagiarism:	Cheating on examinations, through use of unauthorized aids, wandering eyes or inappropriate resources, is forbidden. In addition, plagiarism, or the unattributed use of another's words, code, algorithms or ideas, through either direct appropriation or paraphrase, is a serious breach of academic standards. If you are found to be cheating you will be given an "F" for the course.
Electronic Equipment:	No cell phones are permitted to be audible during class. No cell phones are permitted in the classroom/lab during exams. Computing equipment is permitted for classroom assignments, however, text messaging, audio and non-lab related Internet surfing is prohibited at all times.
Communications:	If the student is interested in being notified by the instructor in the event of unforeseeable class cancellation (other than college wide), late class start or other emergencies that may change the normal class schedule, then they must submit a contact email address to the instructor. This email address will be kept private.
Other Student Responsibilities:	Each student is responsible to be aware of important dates on the college calendar, including: the last date to Withdraw Passing and the last date to Withdraw Failing. You are responsible for understanding the information contained in this syllabus. The student is responsible to check the college website for any notification

information with regards to cancellations due to weather or other. It is the student's responsibility to recognize and be familiar with the full contents of the Student Handbook and all college policies.

Disability Accommodations:	Students with documented disabilities are entitled under the law to reasonable accommodations. If you have a disability and need accommodations, please notify the instructor as early as possible during the semester. You should also contact the Office of Disability Services.		
Miscellaneous:	“Publication” of written work and assignments -- By your continuation in this course and by submitting written assignments and work, you understand that you are granting a limited license to publish that work for the purposes of grading the work. That limited license extends to my submission, within my sole discretion, to various electronic grading tools (e.g., grading books, cite checkers, etc.).		
Methods of Evaluation:	Course grade is determined as follows:		
	Mid-Term Exam	10%	
	Final Exam	10%	
	Labs	56%	
	Project	10%	
	Participation	14%	(There are 14 class participation units)
Grading System:	A = 92 - 100	C + = 78 - 82	F = 0 - 64
	B+ = 88 - 91	C = 71 - 77	
	B = 83 - 87	D = 65 - 70	

Tentative Course Schedule

(This syllabus is tentative and subject to change as instructor deems necessary)

Week	Chapter	Topic	Labs
1	Review of JAVA, course requirements, home facilities. (1-2)	Review of the fundamentals	Set up IDE, Lab 0; Make program stubs In-class review lab
2	1-2	Objects and Classes	Employ console techniques L1: Very simple calculator
3	7	Strings	L2: Anagrams
4	4	Exception Handling	L3: Exceptions
5	12	Encapsulation and Text File I/O	L4: Read/Write text files
6	12	More File I/O Review	L5: File processing
7	First half semester	MidTerm	lab5 due today
8	9	Swing GUI	Windowed mechanisms L6: SWING
9	10	Event Handlers	
10	11	Multi-Threading	serialized focal points group in-class lab
11	11	Multi-Threading	L7: multi-tasking classes
12		Networking	instant messaging L8: client/server
13		Networking	
14	Review and Questions	complete lab work	project demos, lab8 due today
15	Last half semester	Final Exam	