## Spring 2015 COSC 2436 Programming Fund III

Name: Professor Katrieva Jones E-Mail: kmunroe@odessa.edu

Phone: 432.335.6462

Office: Composite Technology Building, Room 122

Office Hours	
Campus Office Hours:	Monday/Wednesday 9:00am - 12:00pm Tuesday/Thursday 9:00am - 12:00pm Friday 9:00am - 9:30am
Online Office Hours	Monday/Wednesday 9:00am – 12:00pm Tuesday/Thursday 9:00am – 12:00pm Friday 9:00am – 9:0am I am not online on Sundays. I am not online after 8pm

#### **About Your Instructor**

My name is Katrieva Jones Munroe and I will be your instructor during this 8 week class from October 20. 2014 - December 10. In my past life, I was a computer applications developer and later started teaching in higher education. I have taught in higher education, at community colleges and universities for over 10 years. My hobbies include traveling abroad, hiking and enjoying the great outdoors. I enjoy learning from students and teaching students.

#### **Preferred Method of Communication:**

The best way to communicate with me is via phone or email. Also, check in Blackboard three times a day for announcements, including any changes in the course schedule due to instructor illness or conference attendance. Appointments with me may also be scheduled. Blackboard is the preferred way to send/receive emails from me and I will send all correspondence to student via Blackboard.

#### **Expectations for Engagement for Instructor:**

As an instructor, I understand the importance of clear, timely communication with my students. In order to maintain sufficient communication, I will

- provide my contact information at the beginning of the syllabus;
- respond to all messages within 24 hours if received Monday through Thursday, and within 48 hours if received Friday through Saturdays. I am not online Sundays;
- notify students of any extended times that I will be unavailable and provide them with alternative contact information (for me or for my supervisor) in case of during the time I am unavailable.

As an instructor, I understand that my students will work to the best of their abilities to fulfill the course requirements. In order to help them in this area, I will

• provide clear information about grading policies and assignment requirements in the course

- syllabus, and
- communicate any changes to assignments and/or to the course calendar to students as quickly as possible.

As an instructor, I understand that I need to provide regular, timely feedback to students about their performance in the course. To keep students informed about their progress, I will

- · post grades for discussion postings within one week of the discussion thread closing.
- provide grades for assignments within 2 weeks of the due date.

## Textbook Information and Required Hardware/Software

#### **Required Materials:**

#### Textbook:

Download your FREE text book by clicking on the Module 1 folder in Blackboard. You do not need to purchase a book for this class.

#### Software:

- Microsoft Office 2013 Professional Edition includes MS Word, MS Excel, MS Access, and MS PowerPoint (if you plan to work from home, the book package in bookstore comes with a trial version of this software).
- Java Standard Edition Development Kit 7 (JDK 7)
- **Flash drive:** At least 8GB in memory. If you are enrolled in a web class, you can save your files to your computer. If you will be using someone else's computer, you will need to purchase one of these.
- **Computer with Internet Access:** Throughout the semester, you will need to have access to a computer and the internet to complete work in this class.

#### **OPTIONAL**

#### **Equipment:**

**Ear buds** – purchase these if you would like to be able to listen to the training lectures in class.

## Campus Computer Labs

Should you experience technical difficulties with your personal PC or should you need access to a computer; computer labs can be found in the library or the Composite Technology in CT136. Tutors are available in CT136 M-Thursday from 12pm – 5pm

The library computers are available Monday – Friday til 10:00pm and Saturdays and Sundays. All other labs are available Monday – Friday only. There are BCIS tutors in the library as well. Please contact the library for tutoring hours.

### Information About the Course

## **Course Description**

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis.

## **Course Objectives**

- 1. Demonstrate a thorough understanding of the behavior of basic data structures: lists, stacks, queues and trees by developing programs that implement or apply these data structures.
- 2. Demonstrate a thorough understanding of how data structures impact the performance of algorithms.
- 3. Demonstrate a thorough understanding of the object-oriented concepts of data abstraction and encapsulation by designing and implementing data structures using classes.
- 4. Demonstrate a thorough understanding of template classes by developing programs that use them.
- 5. Demonstrate an understanding of recursion by applying recursive techniques to solve problems including list and tree processing.
- 6. Demonstrate a thorough understanding of searching and sorting algorithms including recursive techniques.
- 7. Demonstrate proficiency in implementing data validation code and performing unit and integration testing by developing robust solutions to the assignments in this course.
- 8. Demonstrate good documentation style in all of the programs written in this course.

### **Course Prerequisites:**

COSC 1437

## **Course Topics:**

	Course Topics
Module 1	Chapter 1 Algorithms Matter
	Chapter 2 Mathematics of Algorithms
Module 2	Chapter 3 Patterns and Domains: Chapter 4 Sorting Algorithms
Module 3	Chapter 5 Searching
Module 4	Chapter 7 Path Finding in Algorithms
	Chapter 8 Network Flow Algorithms
Module 5	Chapter 9 Computational Geometry
Module 6	Chapter 10 When All Else Fails
Module 7	Final Exam covering chapters-1,2,3,4,5,7,8,9 and 10

## Grading

Type of Assignment	Points
Blogs/Attendance	10
Project	25
Blackboard Assignments	40
Final Exam	25
	100

#### **Grading Scale:**

"A" = 89.5-100

"B" = 79.5-89

"C" = 69.5-79

"D" = 59.5-69

"F" = 0-599

#### **Grading Policy:**

Please understand that this is a required course for the CIS/CS program in order to prepare you for the IT field. Quality work and active participation is expected and not to be negotiated. As a general policy, grades will be taken in class. Any written assignments or tests will be graded outside of class. You can expect feedback on graded assignments within 5 business days.

#### **Attendance Policy**

Students are expected to attend class regularly. Attendance will be recorded using a "sign-in" sheet. Excessive absences will be grounds for disciplinary action, and will be determined on a case-by-case basis. If you are more than 15 minutes late to class or leave class early without notifying the instructor, this will count as an absence. Students are permitted one absence before a loss of points. Students who are absent more than 3 times within an 8 week face to face session or students you do not logon to the Blackboard online classroom within 5 consecutive days may be dropped from the course by your instructor.

#### **Late Work**

All work must be submitted by the due date/deadline indicated on the syllabus. Late submissions will not be accepted.

#### Make -up work

Make up work is accepted if any only if you have a documented extenuating circumstance that prevented you from submitting your work. Should you have technical issues with Odessa College's internet or sever, you will be allowed to make-up your work.

#### **Extenuating circumstances**

Extenuating circumstances include incarceration, car wreak, child birth, death in the family of immediate family member. The following reasons do not constitute an extenuating circumstance, overwhelmed with course load, internet/server problems outside of Odessa College, busy work schedule/family life. In all cases, you must show proof of your extenuating circumstances and it must be approved by your instructor before you are allowed to make-up work.

#### **Assignments**

All chapter assignments must be submit in Blackboard via the chapter assignment drop box as a zipped/compressed file. All Assignments will have a cutoff date for submission. Work will not be accepted after the cutoff date. You only have 1 submission for each assignment, so make you are satisfied with your work before you submit it.

**Tests (major exams):** All tests (major exams) are **closed book** unless specifically stated otherwise by the instructor. All tests (major exams) are to be **individually** completed unless specifically stated otherwise by the instructor. You only have 1 submission for each test, so make you are satisfied with your work before you submit it. Test (major exams) will come from your book, notes and/or PowerPoint slides. Test (major exams) may be essay, application-based (you create an application then submit it via Blackboard), multiple choice/true false or matching.

**Discussion Questions/Participation/Blogs:** You will several discussion questions this semester. Log onto Blackboard, click on the Discussion Questions Folder to view questions. All other points towards participation/discussion questions will come from class participation and/or discussion questions posted in Blackboard. Most of the discussion questions in this class will come from CourseCast. The online feature, CourseCast, is a library of weekly podcasts designed to keep you up to date with the latest in technology news. Click the link, <a href="http://coursecasts.course.com">http://coursecasts.course.com</a>, and you can download the most recent CourseCast onto your mp3 players or you may read the articles/scripts.

## **Student Course Participation**

As a student, I understand that I am responsible for keeping up with the course. To help with this, I will

- identify alternative computer and internet access in case my primary computer crashes or my internet service is unavailable;
- recognize that the college provides free Wi-Fi and computer labs during regular campus hours to help me with accessing my course; and,
- understand that my instructor does not have to accept my technical issues as a legitimate reason for late or missing work if my equipment or service is unreliable.

As a student, I understand that it is my responsibility to communicate quickly with the instructor any issue or emergency that will impact my involvement with or performance in the class. This includes, but is not limited to

- · getting "kicked off" of the system during tests or quizzes;
- having trouble submitting assignments; and
- · dealing with a traumatic personal event.

As a student, I understand that it is my responsibility to understand course material and requirements and to keep up with the course calendar. While my instructor is available for help and clarification, I will

- seek out help from my instructor and/or from tutors;
- ask questions if I don't understand; and
- access my course several times during the week to keep up with assignments and announcements.

### Course Policies

#### **Disclaimer**

This syllabus is tentative and subject to change in any part at the discretion of the instructor. Any changes will be in accordance with Odessa College policies. Students will be notified of changes, if any, in timely manner.

#### **Original Effort**

The work submitted for this course must be original work prepared by the student enrolled in this course. Efforts will be recognized and graded in terms of individual participation and in terms of ability to collaborate with other students in this course.

#### **Course Alignment with Industry Standards**

(Insert Here)

#### **Digital Protocol**

Cell phones must be placed on either *vibrate* or *silent* mode and are to be accessed in emergency cases only. The use of laptops or any other digital device is permitted in order to facilitate note-taking relative to instruction. Any written assignments will be submitted electronically on Blackboard. The electronic recording of the time on Blackboard will be considered the time of assignment submission. Take necessary steps to ensure that your assignments are submitted on "Blackboard" time. Back-up and/or additional copies of all assignments submitted is encouraged. Computers/printers are available to OC students in the LRC (301-303); therefore, not having access to a computer due to technical issues (crash; corrupted files) will not be considered as an acceptable reason for not completing assignments. If there is a loss of server connection with Odessa College due to maintenance, then an email will be sent to student with pertinent information and status reports. Assignments submitted electronically need to be WORD documents (doc or docx).

#### **Attendance Policy**

Students are expected to attend class regularly. Attendance will be recorded using a "sign-in" sheet. Excessive absences will be grounds for disciplinary action, and will be determined on a case-by-case basis. If you are more than 15 minutes late to class or leave class early without notifying the instructor, this will count as an absence. Students are permitted one absence before a loss of points. Students who are absent more than 3 times within an 8 week face to face session or students you do not logon to the Blackboard online classroom within 5 consecutive days may be dropped from the course by your instructor.

#### **AVID**

This course has been identified as a course by Career, Technical, and Workforce Education as one in which teaching and learning strategies adopted by AVID will be implemented. As a student in the legal program, you will be expected to develop an understanding of the strategies, to model the strategies, to maintain fidelity of implementation, and to examine how these strategies may

impact your effectiveness as a professional in your chosen area of occupation, either through coursework or practicum experience as outlined by the course instructor.

#### **Grade Inquiry Policy**

It is the responsibility of the individual taking this course to maintain accurate track of assignment submissions and grades. There will be opportunities during the semester to meet with the instructor to discuss your academic progress. Contact the instructor to schedule an appointment. Class time will not be used for grade inquiries. All grades are final.

#### **General Course Requirements**

- 1. Attend class and participate.
- 2. Contribute and cooperate with civility.
- 3. Submit assignments on time. Late work will not be accepted. Medical and/or family circumstances that warrant an extension on assignments need to be presented to the instructor. Extensions will be allowed at the instructor's discretion.

#### **Incomplete Policy**

An 'Incomplete' grade may be given only if:

- 1. The student has passed all completed work
- 2.If he/she has completed a minimum of 75% of the required coursework. A grade of an "I" will only be assigned when the conditions for completions have been discussed and agreed upon by the instructor and the student.

## Course Schedule

### (Tentative and Subject to Change) all work is due by 11:59pm on the posted due date

Week of	Module (Find items in Blackboard in this folder)	Topic	Assignment	Due Date
March 17 – March 30	Module 1	Read syllabus  Chapter 1 Algorithms Matter:  The Role of Algorithms in Computing The Role of Algorithms Assignment Chapter 2 The Mathematics of Algorithms Started Folder Insertion Sort Assignment  Blog in Bb* Introduce Yourself	:	03/30
March 17 – March 30	Module 2	Chapter 3 Patterns and Domains: Growth of Functions Blog in Bb* Trends in Software Eng Chapter 3 Reading Assignment Chapter 4 Sorting Algorithms: Divide and Conquer Chapter 4 Assignment	ineering Blog	03/30
March 30 – April 6		Chapter 5 Searching: Probabilistic Analysis and Randomi Chapter 5 Assignment  Term Averages Posted- April 10 grades from Module 1 through Modul		04/06
	includes all	Brades from Module 1 tillough Modul		

April 6 – April 12	Module 4	Chapter 7 Path Finding in Algorithms	04/12
		Chapter 7 Assignment	
		Blog in Bb* Five Hottest Programming Blogs	
		Chapter 8 Network Flow Algorithms Chapter 8 Assignment	
April 13 – April 21	Module 5	Chapter 9	04/21
		Computational Geometry Chapter 9 Assignment	
A   24		y to Drop (8 WK Term), Thursday April 23	04/27
April 21 – April 27	Module 6	Chapter 10 When All Else Fails	04/27
April 27 – May 4	Make up	Make up exams/work	05/4
	Week	As approved by your instructor	
May 4 – May 6	Module 7	Final Exam covering all chapters on syllabus	05/06

# Odessa College Policies

#### **Tuition Discounts**

The "First Course is Free" discount waives standard tuition and fees for the first 3 credit hours taken at Odessa College. The discount applies to high school graduates taking their first class at Odessa College as well as transfer students taking their first class at Odessa College.

The "Academic Progress Discount" provides a 10% tuition discount upon completion of 30 credit hours until reaching 45 credit hours. It provides a 20% discount upon completion of 45 credit hours until reaching 60 credit hours. Student must maintain a 2.0 GPA to remain eligible for the discount.

#### **Academic Policies**

Note that the OC Student Handbook states (page 32) that "[i]n cases of academic dishonesty, the instructor has the authority to impose appropriate scholastic penalties. Complaints or appeals of disciplinary sanctions may be filed in accordance with the college due process procedure. Copies of the college due process procedure are available in the office of The Director of Student Life (CC104)."

For more information on your rights and responsibilities as a student at Odessa College, please refer to the following: The 411 of OC: Student Handbook 2012-2013; Student Rights & Responsibilities http://www.odessa.edu/dept/studenthandbook/handbook.pdf

#### **Scholastic Dishonesty**

Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by board policies. Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism and collusion.

#### "Cheating on a test" shall include:

- Copying from another student's test paper
- Using test materials not authorized by the person administering the test.
- Collaborating with or seeking aid from another student during a test without permission from the test administrator.
- Knowingly using, buying, selling, stealing or soliciting, in whole or in part, the contents of an unadministered test.
- The unauthorized transporting or removal, in whole or in part, of the contents of the unadministered test.
- Substituting for another student, or permitting another student to substitute for one's self, to take a test.
- Bribing another person to obtain an unadministered test or information about an unadministered test.
- "Plagiarism" shall be defined as the appropriating, buying, receiving as a gift, or obtaining by any means another's work and the unacknowledged submission or incorporation of it in one's own written work.
- "Collusion" shall be defined as the unauthorized collaboration with another person in preparing written work for fulfillment of course requirements. (Source: Odessa College Student Handbook 2012-2013, page 29-30).
- Any student found cheating will receive a "F" in the class.

#### Special Populations/Disability Services/Learning Assistance

Odessa College complies with Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. If you have any special needs or issues pertaining to your access to and participation in this or any other class at Odessa College, please feel free to contact me to discuss your concerns. You may also call the Office of Disability services at 432-335-6861 to request assistance and accommodations.

Odessa College affirms that it will provide access to programs, services and activities to qualified individuals with known disabilities as required by Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990 (ADA), unless doing so poses an undue hardship or fundamentally alters the nature of the program or activity Disabilities may include hearing, mobility or visual impairments as well as hidden disabilities such as chronic medical conditions (arthritis. cancer, diabetes, heart disease, kidney disorders, lupus, seizure disorders, etc.), learning disabilities or psychiatric or emotional disabilities. A student who comes to Odessa College with diagnosed disabilities which may interfere with learning may receive accommodations when the student requests them and submits proper documentation of the diagnosis. A Request for Accommodations form and guidelines for beginning the request process are available in the OC Help Center or on the Odessa College web site at http://www.odessa.edu/dept/counseling/disabilities/index.htm. The college strives to provide a complete and appropriate range of services for students with disabilities such as assistance with testing, registration, information on adaptive and assistive equipment, tutoring, assistance with access and accommodations for the classroom where appropriate. For information regarding services, students with disabilities should contact the Office of Disability Services in the OC Help Center located in Room 204 of the Student Union Building or call 432-335-6433. (Source: Odessa College Catalog of Courses 2012-2013, page 52)

#### **Dropping a Course or Withdrawing from College**

Students wishing to drop a non-developmental course may do so online using WebAdvisor, at the Wrangler Express, or Registrar's Office. A student wishing to drop a developmental course or withdraw from college should obtain a drop or withdrawal form from the Wrangler Express or the Registrar's Office. Students are encouraged to consult with instructors prior to dropping a class. Students may not completely withdraw from the college by use of the Web. Students must drop a class or withdraw from college before the official withdrawal date stated in the class schedule. Students who are part of the Armed Forces Reserves may withdraw with a full refund if the withdrawal is due to their being ordered into active duty. A copy of the student's orders must be presented to the Registrar's Office at the time of the withdrawal. For details, please contact the Office of the Registrar. No longer attending class does not automatically constitute withdrawal from that class, nor does a student's notification to an instructor that the student wishes to be dropped. Failure of a student to complete the drop/withdrawal process will result in a grade of "F." (Source: Odessa College Catalog of Courses 2012-2013, page 36)

## Student Support Services and Technical Support

#### **Blackboard Support**

#### I can't log into my Blackboard Course, who do I contact?

Contact the Student Success Center: 432-335-6673 or online at

https://www.odessa.edu/dept/ssc/helpdesk\_form.htm. The SSC can provide you with your Blackboard login name. If you are not sure what your password is, they can reset your password.

#### I'm having a problem in my Blackboard Course, who do I contact?

For any problem that you have in your online course, always contact your Instructor first. Refer to the Instructor's Contact Information area of the Syllabus for their preferred method of contact and the expected response time.

#### Additional Blackboard Help Resources:

Service	Assistance Provided	Available
Blackboard Help for Students	Website with a searchable list of topics on how to navigate and	Online Click here.

	use Blackboard for online courses.	
Blackboard On Demand Learning Center for Students	This website provides an extensive list of short tutorial videos for student activities performed in Blackboard.	Online Click here.
Blackboard Collaborate: First Time Users	If you have never used Blackboard Collaborate before, this website provides a system requirements check, configuration instructions, and training and resources area.	Online Click here.
Blackboard Collaborate: Essentials for Participants	This website provides essential information for Participants of Collaborate sessions. Any Collaborate user, whether first-time or experienced, would benefit from reviewing the information here.	Online Click here.

#### Student E-mail Support

How do I set up, access, or update my Odessa College Student E-mail account?

Go to this website and follow the directions on the page: http://www.odessa.edu/gmail/.

#### I can't access my student email! I forgot my password!

Contact the Student Success Center: 432-335-6673 or online at

https://www.odessa.edu/dept/ssc/helpdesk\_form.htm.
They can provide you with assistance in accessing your student email (created by OC) and can also assist with resetting your student email password. Make sure to have your student ID number available!

Your Blackboard login name is associated with your OC created student email account. All Correspondence for this course will be submitted using your Odessa College student email address.

## Support for Students with Disabilities How do I contact the Office of Special Populations?

Main Number	432-335-6861
Campus Location	SUB 204N in the Student Union Building
Email	Becky Rivera-Weiss - brivera@odessa.edu
Website	To find out more about services provided by the Special Populations office, please visit: <a href="http://www.odessa.edu/dept/counseling/disabilities/index.htm">http://www.odessa.edu/dept/counseling/disabilities/index.htm</a>

Learning Resources Center (LRC; Library)
How do I contact the Learning Resource Center?

Main Number	432-335-6640
FAQ Service	LibAnswers: http://libanswers.odessa.edu
Contact a Specific OC Librarian	Pat Quintero at 432/335-6350 or pquintero@odessa.edu Donna Clark at 432/335-6645 or dclark@odessa.edu Carolyn Petersen at 432/335-6641 or cpetersen@odessa.edu
LRC Services and Guidelines Website	https://www.odessa.edu/dept/library/services/index.htm

#### **Equipment and Services Provided:**

The Murry H. Fly Learning Resources Center (LRC) supports the college's curriculum resulting in a primary emphasis on each student's individual study and research needs. The faculty and staff work with the LRC's Technical Services and Public Services Departments in choosing materials to support all college programs. More than 59,000 books, 50,000 electronic books, 350 current periodicals, 6,700 media holdings, eight newspapers, and 60 databases are available to enhance the educational process.

Equipment/Services Available	Used For	Available
Books, videos, CDs	Research	On Campus and Online
Specialized databases not available online for free	Research	On Campus and Online
Magazines, newspapers, & scholarly journals	Research	On Campus and Online
Computers	Research & word processing	On Campus
Selected textbooks for short-term use	Course work	On Campus
Trained staff	Answer "where do I find?"	On Campus and Online
Tutorials	Tips for research strategies	On Campus and Online
Photocopiers, VHS/DVD players, FAX service	For course work	On Campus
Quiet study areas	For course work	On Campus

### Student Success Center (SSC) / AVID Center

#### **How do I contact the Student Success Center?**

Appointments are preferred, but walk-ins will be served as soon as possible.

Main Number	432-335-6673
Campus Location	1st floor of the Library

Website with Additional Help and Information	http://www.odessa.edu/dept/ssc/
Live Online Assistance / Chat	Click Here (If no one is currently available, please put your email and question(s) in the appropriate areas of the form and hit 'send.' Your question(s) will be addressed as soon as an SSC staff member becomes available.)

**Equipment and Services Provided:**The purpose of the Odessa College Student Success Center is to provide assistance to students in meeting their academic and career goals. The SSC strives to continually provide new and updated resources that will empower all Odessa College students to succeed at OC and beyond.

Equipment/Services Available	Used For	Available
Tutoring by CRLA & Avid trained tutors	Understanding course work and motivation	On Campus and Online Click here for more information.
Student Information Seminars (SIS)	Demo email, Blackboard and SSC resources	On Campus and Online Click here for more information.
Study Skills	Tools needed to succeed	On Campus and Online Click here for more information.
Basic Technology	To navigate classes, email, etc.	On Campus and Online
Plato Web	Practice for TEAS test and basic math, science, etc.	On Campus and Online Click here for more information.
Project T.I.E.	Practice for GED/COMPASS	On Campus and Online Click here for more information.
Student Orientation/Tour	Show individual students where their classes will be. SIS presentation	On Campus
M.O.R.E. Mentoring Program	Networking, tips to navigate college life successfully	On Campus Click here for more information.
Smart thinking	Online tutoring service. Connect with an estructor and interact with a live tutor.	Online Click here for more information.

# Veterans Support How do I contact the office for Veteran's Outreach?

Main Number	432-335-6833
Campus Location	204M (Help Center) in the Student Union Building
Email	Gloria Rangel - grangel@odessa.edu
Website	To find out more about services provided by the Veteran's Outreach office, please visit: <a href="http://www.odessa.edu/dept/counseling/veterans/index.htm">http://www.odessa.edu/dept/counseling/veterans/index.htm</a>