

Advanced Java Programming – COP2805

Florida Keys Community College

I. Course Information

COP2805: Advanced Java Programming

Credit Hours: 3

Contact Hours: 45

Prerequisites: COP2800 with grade C or higher

II. Course Method

This course blends independent study with weekly progress meeting with your instructor. Contact your instructor to setup a time to meet.

III. Instructor Information

Instructor: Professor Dawn Ellis

Email: dawn.ellis@fkcc.edu

Office Hours: TBD

Phone: 305-809-3284

IV. Description

This course is not ordinarily counted in the Associate in Arts degree. Advanced Java programming concepts including applets, interfaces, packages, properties, exception handling, native methods, multimedia mechanisms, multithreading and networking capabilities. Continuation of Java's object-oriented features with major emphasis on class implementation. Advanced GUI Design using Java's AWT Package with major emphasis on event handling.

V. College-level Competencies

Florida Keys Community College graduates who complete the core curriculum possess the knowledge, skills and values associated with college-educated individuals. Our graduates demonstrate mastery of competencies integrated within the academic disciplines, such as the ability to effectively communicate, seek creative solutions to problems, exhibit cultural awareness, and command basic technological skills.

1. **Communication:** Comprehend and articulate effectively – written and oral communication
2. **Critical thinking:** Demonstrate mastery of problem-solving skills in the discipline
3. **Diversity:** Interpret and evaluate societal and ethical issues, problems and values
4. **Technology:** Utilize technology effectively

VI. Course Calendar

The Course Calendar lists the learning activities and assessment measures that comprise this course on a modular basis. These activities and assessments are directly related to learning outcomes that support the overall course objectives. There are a total of 1300 points that can be achieved during this 15-week course. Assignments are worth 100 points each, and exams are

valued at 150 points each. There will be several assignments, a mid-term exam and a final exam. Students are able to gauge their performance according to this grading scale throughout the duration of the course. The “Student Assessment” column lists all of the assignments required by this course and their due dates. I strongly recommend you print this out and refer to it often.

Students are responsible for following the course calendar. Consult your calendar before you start a new chapter or section. (Note: Some sections may not be covered in the same order as in the text.) If you ever have a question that begins with “When is _____”, the answer is probably already published in the Course Calendar. Looking here first will probably get you a quick answer to your question.

Competency	Module/Week	Learning Outcomes	Learning Activities	Student Assessments	Points
4	Module 1 (Java Object Oriented Concepts)	Identify, design, code, document, test and debug modules			
		Validate inputs / Validate expected outcomes	Reading: Inheritance – Chapter 8 (Pages 363 – 392)	Programming Problem 8.6 Due Date: 09/02/2011	100
		Identify, design, code, document, test and debug modules	Reading: Polymorphism – Chapter 9 (Pages 393 – 422)	Programming Problem 9.8 Due Date: 09/12/2011	100
		Identify, design, code, document, test and debug modules	Reading: Exceptions – Chapter 10 (Pages 423 – 446)	Programming Problem 10.2 & 10.3 Due Date: 09/23/2011	100
		Validate inputs; perform tests, validate expected outcomes; revise program code appropriately			
2/4	Module 2 (Algorithm Techniques)	Demonstrate understanding of technical and operational			

		feasibility issues in determining a system solution.	Reading: Recursion - Chapter 11 (Pages 448-468)	Programming Problem 11.1 Due Date: 09/30/2011	100
		Demonstrate knowledge, skills, and application of information systems to accomplish specific job objectives.	Reading: Analysis of Algorithms – Chapter 12 (Pages 469-480)	Exercises 12.1-12.5 Due Date: 10/07/2011	100
				Midterm Exam Due Date: 10/07/2011	150
			Reading: Searching and Sorting – Chapter 13 (Pages 481 – 511)	Programming Problem 13.3 Due Date: 10/17/2011	100
	Module 3 (Simple Data Structures)	Develop prototype.	Reading: Stacks – Chapter 14 (Pages 513-566)	Programming Problem 14.2 Due Date: 10/31/2011	100
			Reading: Queues – Chapter 15 (Pages 567-594)	Programming Problem 15.8 Due Date: 11/14/2011	100
	Module 4 (Advanced Data Structures)	Demonstrate proficient use of programming development tools.	Reading: Trees – Chapter 16 (Pages 595-624)	Programming Problem 16.7 Due Date: 11/21/2011	100
			Reading: Binary Search Trees – Chapter 17 (Pages 625-647)	Programming Problem 17.5 Due Date: 12/05/2011	100
			Final Exam Review	Final Exam Due Date: 12/05/2011	150

VII. Materials

Required Textbook: Java Foundations, Introduction to Program Design and Data Structures, 2nd Edition

Lewis, DePasquale, Chase

Publisher: Addison Wesley

ISBN: 978-0-13-212881-0

VIII. Grading Scale (This is Standard Through Out the College)

The following grade scale will apply to this class:

A:	90 % or above
B:	80 - 90 %
C:	70 - 80 %
D:	60 - 70 %
F:	below 60 %

IX. Class Policies

Communications: All class communications should be conducted via D2L. The online format of this class puts a premium on communications. The prime responsibility for timely communications rests with you - the student. We will use the following communication methods:

DISCUSSION FORUMS: The discussion forum can be used for questions you may have regarding software usage or any question that pertains to the class. Questions regarding class policies and subject matter should be posted in the discussion forum as well. This allows the entire class to benefit from the question and the answer. Before you post a question, look through the Discussion Board. That same question may have already been asked and answered.

NEWS: At times important information such as changes in due dates, exam information, etc. will be published via the News tab on the home page. You are responsible for all information published here.

You should logon to D2L 3-4 times each week to check for time-sensitive messages.

D2L EMAIL: The email utility within D2L should not be used for personal items that are not appropriate to share with the entire class.

What you can expect from me:

I normally log into D2L and check for messages at least once per day, as well as at least once over the weekend. If you have an urgent message for me, do not post the same message both on a Discussion Forum and in an email. Doing both will waste your time and will not result in my getting the message any faster. If I expect to be out of contact for more than a couple of days, I will inform the class via the Discussion Forum.

Important Note: If I have not responded to your email or voicemail message by the end of the day after you left the message, you should assume that I did not receive it and leave another message.

Logging Off From D2L

In order to better serve our faculty and students, all D2L users should use the logoff button when completing online course work. By logging off instead of just closing your internet browser window, D2L server space is freed and system performance is optimized. In addition, logging off will more accurately record each student's time logged into the online course.

Late Work

Any assignment not submitted by the date and time specified in the Course Calendar is considered late, unless you have contacted me and I have approved an extension in advance.

Assignments will be accepted up to 5 days late unless you have contacted me and we have mutually agreed on an alternate submission date before the day that the assignment is due. Late will be assessed a late penalty equal to 25% of the total point value of the assignment. The penalty will be based on the date that the assignment is actually submitted.

The above policy does not apply to exams or any other assignment that may due during the Final Exam period. No assignments due during the last week of classes will be accepted late to allow me to submit the course grades to the college on time. **There will be no make-up exams or quizzes.**

Internet connection problems are not an acceptable excuse for late work. You should have a plan in place for internet access in case your primary method is unavailable. I strongly recommend submitting assignments at least one full day early to allow time to recover from technical problems.

If you are unable to access the online classroom due to a College server outage on the date that an assignment is due, the following guidelines apply. If I have not heard from you before the deadline I will not waive the late penalty described above. Send me an internet email before the assignment is due and attach the assignment to the email if applicable. If you don't have access to the internet, leave a message at the phone number listed at the top of the syllabus. If there is a problem with the D2L server that prevents completing an exam or quiz, I will make a reasonable accommodation and publish the information in the online classroom as soon as I am able to log on myself.

No exceptions will be made to the above policies unless you can provide documentation of the situation that I consider adequate.

Withdrawal Policy

Students may withdraw without academic penalty from any course by the established deadline published in the College's calendar. This will result in a grade of 'W' for the course and will not count against the student's GPA.

Students will be permitted a maximum of two withdrawals per course. Upon the third attempt, the student WILL NOT be permitted to withdraw in accordance with State of Florida regulations and will receive an earned grade for that course.

It is the responsibility of the student wishing to withdraw from the course to do so by the date published in the College Academic Calendar. Students who abandon the course or do not withdraw themselves by the published deadline are subject to receiving a grade of F. An instructor may withdraw a student from courses for excessive absences and/or non-attendance up to the 70% point in the semester.

Exams and Quizzes

I recommend the following general process for studying each chapter:

- Read each chapter once to get an idea of its contents.

- Read the chapter carefully, ensuring you understand each concept.
- Use the chapter notes available in the online classroom to supplement the textbook.
- Use the study guide. You should be able to provide a detailed explanation for each item in the study guide.

If you can provide a detailed explanation for every item in the study guide and you understand the reasons behind the all of the correct answers in the review games, you will be well prepared for the tests in this class.

Post any questions you have in the appropriate discussion forum. Myself or a classmate will be sure to help you.

Exams and quizzes may be taken any time during the period listed in the Course Calendar. They will be available beginning on the Monday prior to the due date, unless otherwise specified. All exams and quizzes will be given online via D2L. There is no requirement to take tests on campus. All exams and quizzes are open book and open notes. Calculators may be used. All exams and quizzes will have a time limit. My goal is to test what you have learned, not what you can look up. Every test should automatically submit itself at the end of the scheduled time, but it is your responsibility to track the time you have spent and how much time you have remaining. Exams not submitted by the end of the scheduled time will be penalized:

The questions will be challenging. You should study as if the exams and quizzes were closed book, because you won't have time to look up every answer. If you have to look up more than a few answers, you will run out of time.

Question types will be a combination of multiple choice, matching, true/false, fill in the blank, and essay.

On occasion, computer problems will occur during an exam or quiz. If I have to reset your attempt to allow you to complete it, then I have lost control over the time allowed for the assignment. I may, at my discretion, have you take a makeup exam since the original exam environment will have been compromised. If I have to create a makeup exam, be advised that it will be more difficult than the original exam and will likely consist entirely of essay questions. So, you need to be very careful that you don't inadvertently cause any problems during the exam. If your regular internet access method is not reliable, you need to find a reliable access method for exams. The College has computer labs available for your use.

I generally do not reset final exams. If a problem occurs during a final exam, I will create a makeup exam for you as described in the previous paragraph. Be extra careful that you do not inadvertently cause any problems during the exam.

How Much Study Time You Should Expect To Devote To This Course

Most educators recommend that students spend 1-2 hours outside of class studying and completing assignments for every hour spent in class. For a typical 3 credit hour class, this translates into a total of 6-9 hours every week per course. This same guideline applies to online courses. You should expect to spend a total of 6-9 hours each week studying and completing assignments for each course you take.

This is a guideline. Some classes will require more time and effort than this guideline and some will require less, and the time any individual student will need to spend will vary. You should expect the study time you will need in any class will be toward the high side of the guideline

until at least after the first exam or quiz. Then you can compare the effort you expended with the results you earned and make any adjustments necessary.

Academic Honesty & Plagiarism

Students are expected to respect and uphold the standards of honesty in submitting written work to instructors. Though occurring in many forms, plagiarism in essence involves the presentation of another person's work as if it were the work of the presenter. Any cheating or plagiarism will result in disciplinary action to be determined by the instructor based on the severity and nature of the offense. It is the student's responsibility to review the College's policy on Academic Honesty.

Collaboration and discussion is encouraged in all course aspects other than actually completing the assigned work (quizzes, exams, homework, projects, etc). Indeed, collaboration often leads to increased understanding of the material being covered. If you have questions about an assignment, I encourage you to speak up and ask questions about it.

Plagiarism is a form of fraud and will not be tolerated. You are expected to do your own work. Copying text or images from any source and claiming it as your own is considered plagiarism. Submitting copied text as most or all of your answer on a homework or project is also a form of dishonesty, even if you cite the source. I want to read YOUR words, not someone else's words. Using quoted text to support your answer will not usually be necessary in this class.

If I catch you in any form of academic dishonesty, you will receive a grade of zero for that assignment. If I catch you a second time, you will earn a failing grade for this class and be reported to the College.

Attendance Policy

I will monitor student attendance and participation in educational activities on a weekly basis. Students are required to participate in their online course each week as verified by activity within the D2L Learning Management System.

There will be at least one assignment in this course that is due every week of the semester, unless the College is officially closed for the entire week. These may include discussion forum posts for class participation, exams and quizzes, homework, projects, or a combination of these. I will take attendance each week based on your submission of the assignments that are due that week, so it is important that you submit every assignment on time. If you submit all of the week's assignments late, you will be marked as absent from class for that week. If at least one assignment is submitted on time each week, you will be marked as present.

Simply logging into the online classroom without submitting any of the assignments due is not sufficient to count for attendance purposes. Students who do not regularly participate in class by submitting the assignments that are due each week are considered absent from the class.

Delays in Getting the Textbook

Having regular access to the textbook is a requirement for this class. Whenever possible students should have the text in hand before the first day of class each semester, but there will be times that students are unable to get the text until after the class begins. If you are in this situation, follow the guidelines below. These guidelines are intended to be general enough to apply to all classes you take, and they may not all apply to this class. Not having the text is not an acceptable excuse for doing no work at all in this class.

The FKCC library has reserve copies of the textbook available for student use. These textbook copies cannot be removed from the library.

During the first week of the semester, complete all of the administrative items. This includes printing the Syllabus and the Course Calendar and Assessment Measures, and returning the Class Contract. The text is not needed for any of these tasks.

Use any resources that are available in the online classroom. This includes links to web sites, review activities, handouts, PowerPoint slide shows, and anything else that may be available. Reading all messages posted in the discussion forums may be the best way to keep up until you have the book in hand.

Look at the publisher's web site for the text. Most publisher text sites have student resources that can help you, and many of these are available even if you do not have the text. As a minimum, the web sites usually have a Table of Contents, which can also help you get an idea what topics we will cover.

Please let me know if you don't have the text by the end of the first week of class. I will not be sympathetic if you wait until after the first week of the semester to tell me you don't have the text.

The above guidelines will probably not be enough to replace the text entirely, but they will allow you to learn enough to participate in the discussion forums each week. This participation is critical to your grade and also for attendance purposes.

Sources of Technical Assistance

If you are having any technical difficulties (e.g., logging in, accessing the discussion board, etc.) please contact the Office of Distance Learning helpline at 305-809-3177 Monday—Friday 8:00AM to 4:00PM or email your question to FKCC.helpdesk@online.fkcc.edu.

Special Needs

If you have any special needs or requirements pertaining to this course, please discuss them with the instructor early in the term. If you have special needs as addressed by the Americans with Disabilities Act (ADA) and need assistance, please notify the Office for Students with Disabilities at 305-809-3292 via email at: karla.malsheimer@fkcc.edu or the course instructor immediately. Reasonable efforts will be made to accommodate your special needs.

Community Decorum

A positive learning experience depends upon respect among all members of this classroom community. Disregard or disrespect for the process, the group or toward any individual will result in removal from the class and may result in you being dropped from the course. Respectful discourse in discussion and email areas is expected and anonymous posting will not be tolerated.

Sexual Predators

Federal and State law requires a person designated as a "sexual predator or offender" to register with the Florida Department of Law Enforcement (FDLE). The FDLE then is required to notify the local law enforcement agency where the registrant resides, attends or is employed by an institution of higher learning. Information regarding sexual predators or offenders attending or employed by an institution of higher learning may be obtained from the local law enforcement

agency with jurisdiction for the particular campus, by calling the FDLE hotline (1-888-FL-PREDATOR) or (1-888-357-7332), or by visiting the FDLE website at www.fdle.state.fl.us/sexual_predators. If there are questions or concerns regarding personal safety, please contact the Campus Security Officer on your campus.

Class Contract

The Class Contract assignment is my method of ensuring you know what you should expect from me, and what I expect from you. By returning the Class Contract to me, you are acknowledging that you:

- a. Understand the policies detailed in this Syllabus.
- b. Understand the expectations and due dates listed in the Course Calendar and Assessment Measures.
- c. Understand that you will be held accountable to the standards published in this document.
- d. The Class Contract must be submitted via the dropbox by the date published in the Course Calendar and Assessment Measures.

By signing my name I acknowledge the above.

Print Name: _____ Date: _____

Signature: _____