COP 3502 - Programming Fundamentals I

http://www.cise.ufl.edu/~pjd/

Instructor: Pete Dobbins E-mail: pjd [at] cise [dot] ufl [dot] edu

Office: CSE E474 Hours: https://www.cise.ufl.edu/~pjd/courses/Schedule.pdf

Course Description & Objectives

The purpose of this course is for students with little or no background in computer science to be introduced to the technical aspects of the field of computer science. Due to the nature and complexity of this field of study, the course will be time consuming and requires serious dedication on the part of each student. Among other topics, we will learn how to solve problems, transform the solution into a program written in the Java programming language, and vice versa.

Although no programming background is expected, be aware that you will be expected to learn how to program and doing so requires very technical work. Attention to detail and analytical thinking will be expected. The programming projects will require students to spend an extensive amount of time working outside of class. In addition, rote memorization is necessary to recall the syntax and definitions of Java and computer science. Please arrange your schedule accordingly.

This course satisfies the ABET Outcome (e): "an ability to identify, formulate, and solve hardware and software computer engineering problems, accounting for the interaction between hardware and software."

COP 3503 – Programming for CIS Majors II should be taken the semester following your completion of this course.

Text Book

Here is the text book we will use. The cheapest and fastest way to purchase it is online.

Objects First with Java, Sixth Edition, Barnes & Kölling, 2016, Prentice Hall, ISBN 0-13-447736-7.

Recommended Text Books

Other recommendations for useful supplements are given here. The cheapest and fastest way to purchase them is online.

 Objects First with Java, Fifth Edition, Barnes & Kölling, 2009, Prentice Hall, ISBN 0-13-249266-0.

- Introduction to Programming and Object Oriented Design Using Java, [newest edition],
 Nino & Hosch, 2005, John Wily & Sons, ISBN 0-471-71227-2.
- <u>Java Foundations: Introduction to Program Design & Data Structures</u>, [newest edition], Lewis, DePasquale, & Chase, 2007, Addison Wesley, ISBN 0-321-42972-9.
- Program Development in Java, Liskov & Guttag, 2001, Addison-Wesley, ISBN: 0-321-43278-9 (includes a free copy of Depasquale's Java Backpack reference guide; for just the text, the ISBN is 0-201-65768-6).

Policies & Grading

General course policies are: http://www.cise.ufl.edu/~pjd/admin/policies/course.html. You are expected **know and follow** all of these policies.

In order to be successful in this course, you should attend lecture. There is no replacement to the experience of seeing the material presented during lecture.

Activity	Final Grade Percentage
Discussion Exam I	20%
Discussion Exam II	20%
Discussion Exam III	20%
Discussion Quizzes	30%
Homework Projects	10%

Discussion Exams

The examination schedule is given here. Discussion exams will be administered during your discussion sessions. On exam days, you will have the full two periods to complete the examination. By holding exams during discussion, you will have access to computers which will assist you in creating programmatic solutions.

Exam	Day	Date	Time
I	Tuesday // Wednesday	2019 // 02 // {12,13}	Your Discussion Period
П	Tuesday // Wednesday	2019 // 03 // {19,20}	Your Discussion Period
III	Tuesday // Wednesday	2019 // 04 // {16,17}	Your Discussion Period

Written Exam

On Tuesday, April 23, 2019 during our two period lecture block, we will have a written examination (pencil and paper, not completed using a computer). This exam is *required* and will automatically replace your lowest Discussion Exam score.

Discussion Quizzes

Every discussion that you do not have an exam, you will have a quiz during the second period of your two period discussion block. Your lowest discussion quiz score will be dropped. Quizzes will be comprised of two activities. First, you will be asked to create solutions to a subset of exercises given to you prior to discussion. Second, you will be asked to solve problems not given to you prior to discussion.

The first period of discussion sessions on Tuesday // Wednesday, April 23 // 24, 2019 will provide question and answer time. The second period of discussion sessions on Tuesday // Wednesday, April 23 // 24, 2019 will be a make up quiz for those students who provided documentation following University standards and guidelines. These students will take the make up quiz on Tuesday // Wednesday, April 23 // 24, 2019.

Make Up Schedule

There will be two make up sessions. Given a university approved excuse for missing an exam or a quiz, the make up for exams (discussion and written) will be on Thursday, May 2, 2019 from 7:30 – 9:30 AM (our university assigned final exam period) and the quiz make up will be on Tuesday, April 23, 2019 during the second period of discussion, as reviewed above.

To be eligible to take either of these make ups, you must inform me one week prior to the conflict in question and present sufficient documentation regarding absences from graded class activities, for example a note from a medical professional if you were to become ill. Do not wait until after you have missed the activity to inform me of your conflict. There are very few events which would impede your participation in a graded activity warranting an exception, that you would not be aware of well before (at least a few hours) the start of the activity. Contacting me after the graded activity may result in the exception not meeting course requirements and a make up option no longer being available. Complete university guidelines for absences and make ups can be found here:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx.

Homework Projects

Homework project assignments will include written homework problems and the creation of Java programs. You lowest homework project score will be dropped. Details for submitting each homework will be given within the project specification. Soft and/or hard copies of projects will be submitted. Soft copies will be submitted via e-Learning (Canvas: https://elearning.ufl.edu/) and unless specified otherwise are due by 11:59 PM on the due date given within the project specification. Hard copies of your solutions will be turned in during lecture or discussion with details again being provided within the project specification. If you will be absent, ensure any assignments have been delivered before the lecture or discussion meeting time.

Late projects: No project solutions can be accepted after the solution is posted. If the solution has not been posted and you submit one day late, there will be a penalty of up to 50% of the

project grade. No projects that are two days late can be accepted. Note, if the assignment is due at 11:59 PM, then at 12:00 AM the project is one day late.

Discussion Sessions

During discussion sessions you will complete Discussion Exams and Quizzes. You must attend and participate in the discussion section in which you are registered. All discussions will meet in CISE classroom labs located through the main CISE lab in CSE E114. Here are the sections, days, periods, and locations for each discussion.

Section	Day	Period	Location	Discussion Leader
11050	Tuesday	6 & 7	CSE E115	See Discussion Announcements
11051	Tuesday	8 & 9	CSE E115	See Discussion Announcements
11056	Wednesday	4 & 5	CSE E113	See Discussion Announcements
11084	Wednesday	6 & 7	CSE E113	See Discussion Announcements
11085	Wednesday	8 & 9	CSE E113	See Discussion Announcements
11086	Wednesday	10 & 11	CSE E113	See Discussion Announcements
11087	Wednesday	2 & 3	CSE E115	See Discussion Announcements
11088	Wednesday	4 & 5	CSE E115	See Discussion Announcements
11089	Wednesday	6 & 7	CSE E115	See Discussion Announcements
11532	Tuesday	6 & 7	CSE E116	See Discussion Announcements
11560	Tuesday	8 & 9	CSE E116	See Discussion Announcements
11562	Tuesday	4 & 5	CSE E115	See Discussion Announcements
11563	Tuesday	4 & 5	CSE E113	See Discussion Announcements
11564	Tuesday	6 & 7	CSE E113	See Discussion Announcements
11565	Tuesday	8 & 9	CSE E113	See Discussion Announcements
11566	Tuesday	10 & 11	CSE E113	See Discussion Announcements
11567	Tuesday	4 & 5	CSE E116	See Discussion Announcements

Practice Exercises

At times there will be practice exercises assigned during lecture and discussion that are not associated with a graded activity. These exercises are supplemental to the course lecture, exams, homework, and quizzes, helping you in your studies and preparation. These exercises will not be collected, however if you would like to discuss your solutions with us, please do so. It is *highly* recommended that you complete and participate in non-graded course activities: *lecture* and *practice exercises*, in addition to the graded activities: *exams*, *projects*, and *discussion*.

Grading Scale & Calculation

University regulations regarding grades and the calculation of grade points earned can be found here: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx. The range used to calculate your final letter grade in our course will be no harsher than this grading scale:

Grade	Highest	Lowest
Α	100	92.00
A-	91.99	89.00
B+	88.99	86.00
В	85.99	82.00
В—	81.99	79.00
C+	78.99	76.00
С	75.99	72.00
C-	71.99	69.00
D+	68.99	66.00
D	65.99	62.00
D-	61.99	59.00
E	58.99	0.00

Final Total

If it is permitted that the course be taken SU, a 75 or higher is required to receive an S (Satisfactory). The formula used to calculate your final total of points is given here. Semester by semester the total worth or number of assignments may vary, however the logic of the formula remains the same, i.e. the Sum of Your Total will be divided by the Total of the Points Available and then multiplied by the Final Grade Percentage. The following provides an example scenario that implements this formula. Again, the specifics of our actual semester may differ. For example, there might be 10 homework projects one semester, while another semester there might be 12 homework projects. Clearly, the calculation of the result will be modified.

In the sample scenario provided here, there are 4 exams (three semester + one written), each worth 100 points, there are 11 homework projects, each worth 25 points, and there are 13 quizzes, each worth 50 pts. Note, drops are accounted for in the calculations given and graded activity totals:

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Exam Total = ((Sum of Exam Scores – Lowest Exam Score) / 300) * 60

Homework
Total = ((Sum of Homework Scores – Lowest Homework Score) / 250) * 10

Quiz Total = ((Sum of Quiz Scores – Lowest Quiz Score) / 225) * 30
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= Exam Total + Homework Total + Quiz Total

Absences

Daily attendance is not recorded in our course. You are free to miss without penalty any lecture where there is no graded class activity. All graded class activity dates (exams, quizzes, and so on) will be announced before the activity is administered. Whether or not you attend lecture, you are responsible for all material covered in every lecture, including during any absences.

Re-grading Requests

All grading/re-grading issues **must** be resolved within **1 week** of the graded work being returned. You must return exams and project assignments to your discussion leader, along with a **printed (not handwritten) attachment** stating the reasons for the re-grade. Do not write anything on the exam itself or detach (un-staple) the pages from each other. If you do so, your exam will not be re-graded. For project re-grading, see the TA who grades your assignment in his or her office hours immediately. Note, when requesting a re-grade, the whole exam and project assignment is subject to the re-grade, not just the portion you specify. We will be happy to discuss the solution and answer any questions, however no change will be made after the allotted week has passed.

Curving

Any curve will be determined at the end of the semester, after every student has completed all course activities and no judgment can be made beforehand. Since new exams, projects, and so on are given every semester, the scale of a previous semester has no bearing or indication as to the final scale for this semester. The grading ranges will be created based upon the complete analysis of every student's final average.

Special Notes for the First Week of Classes (January 7 – 11, 2019)

There will be no discussion sessions the first week of classes. Discussions will meet for the first time starting Tuesday/Wednesday, January 15/16, 2019.

There will be no office hours the first week of classes. If you need to see me, do so after lecture or schedule an individual appointment.

Course Assistants

Here are our Course Assistants (referred to in this document as CAs).

Name	Office	Email & Office Hours
Aishat	CSE E309 // E312	See TA Schedule
Alex Shaw	CSE E309 // E312	See TA Schedule

Alex Shuping	CSE E309 // E312	See TA Schedule
Ekaterina	CSE E309 // E312	See TA Schedule
Jake	CSE E309 // E312	See TA Schedule
Sillian	CSE E309 // E312	See TA Schedule
Zhongkai	CSE E309 // E312	See TA Schedule

Whom Should I Speak with Regarding?

Here are the individuals that you should see concerning the following topics:

Course Policies Pete & Any CA

Course Material Questions Pete & Any CA

Discussion Exercise Questions Any CA

Grading Your Discussion Leader

Picking Up Graded Work Your Discussion Leader

The Do's

Come to my office hours and the TA's office hours. We will be glad to help you as much as possible. Above I refer to the "timeliness of questions", office hours are always a good time to ask any question of the appropriate person. Please remember to follow the guidelines above.

Whenever you send email to me or a TA, the email **must have COP 3502** (and only COP 3502) as its subject. Also, within every email, whether you deem it helpful or not, clearly place **your name** and **section number** at the **top** of the email. Any email without this information will be more difficult and sometimes impossible to answer accurately. Here is the format you should follow:

Name Bullwinkle J Moose

Section 4321

Before emailing questions, always read the syllabus, announcements, and schedule. It is quite possible that your question has already been answered in one of these places.

I and the course staff will answer your questions and resolve your issues the quickest and most clearly in office hours. We receive many emails and reply to them in their order of importance. If you would like to ensure your question is moved to the top of the list, see us in office hours.

Always start early. The projects and your studying will be easier the sooner you begin. Starting early will allow you more time to ask the specific questions you need answered in order to complete the projects and understand the material on testing activities.

The Do Not's

Never place your Social Security # or UF ID # on any course material.

If you choose to use a laptop during lecture, **do not use** an optical mouse. If you are using a laptop during lecture, use it only for the purpose of taking notes and following along with our topic of discussion. Do not play games, chat, or create any similar distractions for yourself and your classmates during lecture. Turn off your cell phone, laptop speakers, and all other electronic devices before lecture begins.

Please review the syllabus and online materials to assist in answering questions such as "Where is the TA's office?" or "What are your office hours?". Copies of the syllabus and other course materials are available on the course web site for your convenience.

You do not need to ask when grades will be posted. We always post grade information as soon as possible. If you would like a grade to be clarified, see the appropriate TA in his or her office hours immediately.

Academic Honesty

We will adhere to the academic honesty policies of the University of Florida, which can be reviewed at http://www.dso.ufl.edu/. When a breach of these policies occurs, the University requires that the incident is reported to Dean of Students office (https://sccr.dso.ufl.edu/contact/report-an-incident/). The incident will then be investigated by Judicial Affairs and when an incident is found to have broken the University of Florida's https://sccr.dso.ufl.edu/students/student-conduct-code/) a penalty is assessed. Penalties range from grade reductions to expulsion from the University. In addition, a notation of the incident is placed on the student's permanent record.

All coursework: exams, projects, homework and so on are to be done individually. A list covering some examples of actions which break the honor code is given here.

- Copying, submitting, or viewing the work of another student.
- Working in any capacity with or helping other student(s).
- Providing any work directly (your own) or transferring the work of someone else to another student.

Recall, our course provides office hours for your assistance in understanding course material. Take advantage of these hours to receive help with your comprehension of the topics being addressed.

Students with Disabilities

Students requesting classroom accommodation must first register with the Dean of Students Office (https://drc.dso.ufl.edu/). The Dean of Students will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. Your documentation and specific needs must be given to me at the *beginning of the semester* so that appropriate arrangements are made. The Dean of Students office requires request forms be completed well in advance to any accommodation request, therefore I need you to ensure your request has been made to me and all documentation delivered at least *seven business days* prior to the date of the request.

Commitment to a Safe and Inclusive Learning Environment

The Herbert Wertheim College of Engineering values broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination.

It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Graduate Program Coordinator
- Robin Bielling, Director of Human Resources, 352-392-0903, rbielling@eng.ufl.edu
- Curtis Taylor, Associate Dean of Student Affairs, 352-392-2177, taylor@eng.ufl.edu
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, nishida@ufl.edu

Sexual Discrimination, Harassment, Assault, or Violence

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the **Office of Title IX Compliance**, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, title-ix@ufl.edu.

Course Registration Requirements

In order to take this course, sit in on the course, or complete an incomplete of this course every student must be <u>officially registered</u> (https://registrar.ufl.edu/registration/reghowto) in either the typical fashion or through the auditing process. Any student not officially registered is in violation of UF policy and subject to the penalties set forth by the University.

Evaluations

Instructor evaluations will be performed near the end of the semester. All students are highly encouraged to provide feedback not only evaluation the quality of the course offered, but also to assist the instructional staff in enhancing the course being offered. Evaluations are completed here: https://evaluations.ufl.edu/evals/Default.aspx. Previous evaluation can be reviewed here: https://evaluations.ufl.edu/results/.

Disclaimer

This document is subject to change at the discretion of the instructor, based on unforeseen circumstances (such as hurricanes, sub-freezing temperatures... this is Florida after all, rifts in the fabric of time, holiday dessert hangover, and so on) occurring during the semester.