CSC 260L.001 and 002: Object Oriented Programming Lab

Professor: Richard Fox Phone: (859) 572-5334

Semester: Spring 2016 Office: GH 444
Class Meeting Time: W 8:10-9:50 am (section 001) Email: foxr@nku.edu

F 12:00-1:40 pm (section 002) Web: http://www.nku.edu/~foxr/

Class Meeting Place: GH 335

Office Hours: MTWR 1-2 pm, F 9-10 am, and by appointment

Textbook:

• <u>Introduction to Java Programming</u> (Comprehensive Version), 10th edition, by Y. Daniel Liang (required text)

Prerequisites and Credits:

C- or better in MAT 109 (or higher) and INF 110 or INF 120 or placement. CSC 260 is a co-req to this course. While this course is not required, it is recommended. If you take this course, you must also be taking CSC 260 at the same time.

Course Topics:

Introduction to the Java programming language including primitive data types and operations, conditional operators and statements (if, if-else, etc), loops, methods, arrays, Strings and Text I/O, objects and classes and an introduction to OOP concepts of polymorphism, inheritance and encapsulation.

Student Learning Outcomes:

By the end of this course, students will learn:

- to write programs in a contemporary, widely-used object-oriented programming language to solve problems using:
 - a variety of data types (integers, real numbers, Booleans, strings)
 - a variety of control structures (selection statements, loops)
 - methods that accept parameters
 - arrays, sorting and searching
 - classes and subclasses (including concepts such as public/private and static/non-static members)
- to understand fundamental concepts of object-oriented programming such as polymorphism, inheritance and encapsulation
- to develop careful program design and coding habits that will give them a foundation for tackling more ambitious projects in the future

This course prepares students for CSC 360 and more advanced programming topics.

Course Materials:

This course uses the instructor's website (not Blackboard!). See http://www.nku.edu/~foxr/CSC260L. This site will contain all assignments including input and instructions, helpful files, and any course notes (there will be very few course notes as this is a lab and not a lecture).

Student Assessment:

Student grades will be determined by the student's performance on 14 programming assignments. The assignments are weighted as follows based on their difficulty:

Programs 1-4 are each worth 5% of your overall grade (20% total)

Programs 5-9 are each worth 7% of your overall grade (35% total)

Programs 10-14 are each worth 9% of your overall grade (45% total)

Your final letter grade will be based on the following grading scale:

A: 100-93 A-: 92-90 B+: 89-87 B: 86-83 B-: 82-80

C+: 79-77 C: 76-73 C-: 72-70 D+: 69-67 D: 66-60 F: 59-0

Mid-term grades will be posted to myNKU by March 15. The grade is *not a predictor of your final grade* but merely your grade at that point of the semester. The last date to drop with a W is Monday, March 21.

Schedule of topics, readings and assignment descriptions:

See http://www.nku.edu/~foxr/CSC260L/readings.pdf

Programming Information and Policies:

There will be weekly programming assignments in this lab (one per week). Due dates will be provided when each assignment is provided to the class. All assignments are due at or prior to the deadline (both the time and date). Late assignments will be accepted with a penalty of 25% per day late. See http://www.nku.edu/~foxr/CSC260L/handouts.html on the grading rubric for assignments.

Programming assignments will all be in Java. While we will be using Eclipse in class, if you prefer to use a different development environment, that is your choice.

All programming assignments are **individual assignments** meaning that students should work alone at all times except when seeking clarification. If the instructor suspects students of copying off of each other or working together, the instructor will give a grade of 0 on those assignments and warn the students. A second offense will cause disciplinary action.

Submission of all assignments must include both the source code (the Java program) and any output. It is preferred that you print these off and hand them in. If you are unable to print, or are not attending class when an assignment is due, you may submit your assignment to the instructor as long as it is received **at least 1 hour** prior to class time. If an email arrives later than that, or the email or attached files are corrupted, the assignment may be counted late.

Credit Hour Policy Statement:

In accordance with federal policy, NKU defines a credit hour as the amount of work represented in the achievement of student learning outcomes (verified by evidence of student achievement) that reasonably approximates one hour (50 minutes) of classroom instruction and a minimum of two hours of out-of-class student work. For every course credit hour, a typical student should expect to spend at least three hours per week of concentrated attention on course-related work including, but not limited to, class meeting time, reading, reviewing, organizing notes, studying and completing assignments. At least an equivalent amount of time is expected for other academic activities such as online courses, laboratory work, internships, practica, studio work and other academic work leading to the award of credit hours.

Estimates of the time required for a typical student to complete course expectations are as follows:

In-class: 100 minutes/week * 15 weeks25 hours/semesterAssignments: .5 hours/week * 15 weeks7.5 hours/semesterReading: 1 hour/week * 15 weeks15 hours/semester

Total: 47.5 hours/semester (approx. 3 hrs/week)

Students should be able to complete most lab assignments in class. However, you might be expected to do some outside-of-class programming to finish at least some of your assignments. Reading should actually accompany the CSC 260 credit hour work load as there is no additional reading beyond what is expected in CSC 260 but you are expected to prepare before each lab (read the lab and any material in the textbook you haven't yet read).

Absentee Policy

For financial aid purposes, the University is now requiring that attendance be monitored during the first week of class. A student will be *administratively dropped* if that student has not attended class during the first week and has not previously contacted the instructor. If for whatever reason you cannot attend class during the first week, contract the instructor to inform the instructor of your intention of staying in the class. You will receive no further warnings!

Aside from this first week, the instructor will not take attendance. It is up to the student to attend class regularly and to determine what materials were missed in the event of an absence. Students must also be aware of due dates and submit their assignments by the due dates to avoid penalties.

Student Evaluation of Instructor and Course:

Northern Kentucky University takes Instructor and Course Evaluations very seriously as an important means of gathering information for the enhancement of learning opportunities for its students. It is an important responsibility of NKU students as citizens of the University to participate in the instructor and course evaluation process. During the last week prior to the final exam, you will be asked to reflect upon what you have learned in this course, the extent to which you have invested the necessary effort to maximize your learning, and the role your instructor has played in the learning process. It is very important that you complete the online evaluations with thoughtfully written comments.

Student evaluations of courses and instructors are regarded as strictly confidential. They are not available to the instructor until after final grades are submitted, and extensive precautions are taken to prevent your comments from being identified as coming from you. Students who complete an evaluation for a particular course (or opt out of doing so in the evaluation) will be rewarded for their participation by having access to their course grade as soon as that grade is submitted by the instructor. On the other hand, any student who does not complete the course evaluation (or opt out of doing so in the evaluation) should expect to incur a two week delay in access to his or her course grade beyond the university's official date for grade availability. To complete online evaluations go to http://eval.nku.edu. Click on "student login" and use the same USERNAME and PASSWORD as used on campus.

In addition, you should be aware of:

- Evaluations can affect changes in courses. Evaluations without comments are less valuable and less credible than those filled out thoughtfully. Comments that are expressed well are more effective than those that are not.
- Positive feedback is just as important as criticism. Moreover, negative evaluations without any explanation or specifics are not especially useful.
- Once grades are submitted, all evaluations are read not only by the instructor, but also by the instructor's department chairperson.
- Evaluations not only provide feedback to your instructor, but also provide information to the department chair for use in performance evaluations. This information affects reappointments, promotions, salaries, and teaching assignments.

Classroom Expectations:

Cellphones must be on vibrate (PLEASE!) You may leave the classroom at any time other than during exams as long as you do so quietly. If you come in late, please be quiet. During an exam, you may leave to answer your phone, use the facilities, etc, but please inform the instructor before leaving. While the instructor is lecturing, please be quiet. Do not engage other students in conversation. You may ask questions at any time during a lecture. Please do ask questions and please ask for more example problems if you feel you need them. You are encouraged to bring a laptop to class if you feel it will help you.

Student Honor Code:

This Student Honor Code [the "Honor Code"] is a commitment by students of Northern Kentucky University, through their matriculation or continued enrollment at the University, to adhere to the highest degree of ethical integrity in academic conduct. It is a commitment individually and collectively that the students of Northern Kentucky University will not lie, cheat, or plagiarize to gain an academic advantage over fellow students or avoid academic requirements.

The purpose of the Honor Code is to establish standards of academic conduct for students at Northern Kentucky University and to provide a procedure that offers basic assurances of fundamental fairness to any person accused of violations of these rules. Each Northern Kentucky University student is bound by the provisions of the Honor Code and is presumed to be familiar with all of its provisions. Students also should aspire to conduct themselves in a manner that is consistent with the highest degree of ethical integrity in all matters, whether covered in the Honor Code or not. The success of this commitment begins in the diligence with which students uphold the letter and the spirit of the Honor Code. Students may view the complete honor code at http://deanofstudents.nku.edu/policies/student-rights.html#policies.

Student Retention and Disabilities Services:

Students experiencing roadblocks to academic success may seek assistance from the Learning Assistance Programs (LAP). Financial, personal, and social concerns sometimes interfere with the dedicated focus needed to be successful in college. LAP helps students connect to academic and support services, create individual learning plans, and advance successfully towards graduation. Services including Norse Advising, student support services, testing and disability services, the math center, the writing center and tutoring. More information is available at http://lap.nku.edu. Call 859 572-5475 for an appointment or stop by University Center 170. You can apply for a tutoring session through TutorTrac at https://tutortrac.nku.edu/tracweb40/default.html.

The University is committed to making reasonable efforts to assist individuals with disabilities in their efforts to avail themselves of services and programs offered by the University. To this end, Northern Kentucky University will provide reasonable accommodations for persons with documented qualifying disabilities. If you have a disability and feel you need accommodations in this course, you must present a letter to me from the Disability Programs and Services Office (SU 303), indicating the existence of a disability and the suggested accommodations. More information can be found at http://disability.nku.edu including how to register and assistant resources and technologies. See also the institutional policy for ADA guidelines.

Any questions? Please ask!

The instructor reserves the right to alter the syllabus if circumstances dictate.