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| **44-542 Object-Oriented Programming Fall 2016** |

**Course Description** This course provides fast-paced coverage of object-oriented programming and data structures.  Students will gain extensive programming experience.

**Prerequisites** Graduate standing and an undergraduate course in Data Structures with a grade of C or better; no previous experience with object-oriented programming is necessary.

**Course Objectives**Upon completion of this course, students will be able to design, implement, test, and debug Java programs that incorporate

* objects and classes
* control structures, exceptions, enumerated types, and input and output
* inheritance, polymorphism, interfaces, abstract classes, generic classes, and lambda expressions
* data structures, including use and implementation of arrays, lists, stacks, queues, maps, trees, and heaps

**Textbooks** ***No textbooks are required; all materials will be provided through the course website.***If you want some supplemental material to study, see the Textbooks unit button on the course website.

**Software** Students must have access to

* Microsoft Office 2013
* Java JDK 8, update 5 or later (free download)
* NetBeans 8 or later (free download)

You will also need to be able to create zip files and to unzip files.  This can be done with WinZip (which is not free), or the free extraction wizard that comes with Windows.

**Northwest Online Tools**All course materials are distributed through the course website at Northwest Online. To access the site, go to [**http://www.northwestonline.org/**](http://www.northwestonline.org/).  Click the link for **Technical Requirements** to see the basic technical requirements your computer system must satisfy. Be sure to complete the **Browser Test** located at the site.

*All* students must have the required software and Northwest Online tools in order to take this course. Students who live close to campus can use the Colden Hall laboratories. These laboratories have all the required software. However, they are open a limited number of hours. Computers in the residence halls and in other locations on campus may lack some of the required tools.  You can install the required software on the laptop issued to you by the university.

**Accessing Course Materials** To access course materials go to the Northwest Online site and log in. Your login ID is your Northwest Student Number (s------). Your password is your social security number, or your 919 number, without dashes. If you are a returning student, your password will be the same as last trimester.

During the first week of classes, you should visit the site and complete the Student Orientation Course, which shows how Northwest Online operates.  Students can also check that their computer system meets the technical requirements.  If you have a laptop issued by Northwest, it will meet the technical requirements.

**Announcements and e-Mail**Announcements are communicated via the **Announcements** page on the course website and your Northwest Missouri State University e-mail account. It is your responsibility to check each of these sources daily. Note that you ***must*** use your Northwest Missouri State University e-mail account on the Northwest Online site. All e-mails in this class will be sent to your Northwest address.

E-mails ***must*** include the course number (44-542) in the subject line. For security reasons, I never open e-mails that do not include an appropriate entry for the subject. All e-mails ***must*** be signed. I do not reply to unsigned e-mails.

**Professionalism** Students are expected to behave in a professional manner in their dealings with each other, the class assistant, and the instructor. E-mails should be politely written, use proper grammar, and follow the rules of capitalization.

**Use of Publicly-Available PCs**All code that you store on a hard drive in a public lab or classroom must be moved to your student storage when you leave the PC. Hard drive space is not intended for private storage.

**Academic Honesty** Northwest Missouri State University Graduate Academic Integrity Policy is given at http://www.nwmissouri.edu/library/courses/evaluation/policies.htm#grad

The document CSIS Academic Integrity Policy clearly explains those types of behavior that would be considered academic dishonesty. You are responsible for reading this document and abiding by the guidelines described therein.

Note that plagiarism includes but is not limited to, failure to give credit for help received on a homework assignment. Also, note that all assignments are to be done individually unless specified otherwise. You may talk to classmates and other students about an assignment, but you must do all the work yourself from beginning to end. Two or more students may sit down together and discuss an assignment as they are working on it, but each student must do his/her own work in completing the assignment. You cannot copy another person's code or written work. You cannot copy database objects or any portion of a database of another student's file.

Failure to follow these guidelines and the remaining guidelines described in the CSIS Academic Integrity Policy will be subject to the penalties described in the catalog. Students are expected to read and understand the CSIS Academic Integrity Policy at [**http://www.nwmissouri.edu/csis/pdf/AcademicIntegrityCSI.pdf**](http://www.nwmissouri.edu/csis/pdf/AcademicIntegrityCSI.pdf)

**Disability Accommodations:** Students in this course who need disability accommodations/modifications should present a copy of their official Northwest accommodation letter from the LAP/S Committee to the instructor during private office hours as early in the term as possible. Additional information can be found online at[**http://www.nwmissouri.edu/swd/**](http://www.nwmissouri.edu/swd/)

**Attendance** This class will have many in-class activities, so attendance is strongly suggested. Some in-class exercises may have points associated with them and may not be announced in advance. A student who misses such an exercise due to an unexcused absence will not be allowed to make it up and will receive a zero. For an absence to be excused, written documentation must be provided and approved by the instructor abided by the MS-ACS attendance procedure. Excused absences include attendance at a university-sponsored event (documented with an excuse signed by the university sponsor prior to the event) or by circumstances considered adequately extenuating by the course instructor.

**Arriving Late for Class** Students are expected to be on time for each class period.

**Exam Policies**Dates for all exams will appear on the course website under the weekly buttons.  If you must miss an exam, it is your responsibility to notify the instructor prior to the exam.

Make-ups for written exams will be given only for valid and verifiable reasons. Valid reasons include illness, family emergencies, and university-sponsored trips. *Written documentation with suitable verification* must be supplied before a make-up will be allowed.

***There will be no make-ups for lab exams. If you miss a lab exam for a valid reason, the lab final (suitably pro-rated) will be used as the make-up.***

***Lab exams are submitted via Canvas.  It is the student's responsibility to ensure that the correct files is dropped in the correct assignment.  If no submission can be found in the dropbox, the student receives a grade of 0 on the lab exam.  If incorrect files are submitted, those are the files that will be graded.***

***All exams are closed book, closed notes, unless explicitly noted in writing by the instructor.***

***No calculators, cell phones, or other electronic devices can be used during exams or quizzes unless explicitly allowed by the instructor.***

**Quizzes**There may sometimes be short quizzes, usually worth five points or less.  Quizzes will not always be announced in advance.  They will usually be given at the beginning of the class.  If you arrive late, after the quiz has started, you cannot take the quiz.  If you miss a quiz due to an unexcused absence, you will receive a grade of zero on the quiz. Different sections may have quizzes on different days.

**Due Dates**Each assigned, graded activity will have a due date posted. Penalties for late assignments will be described on the website.  If no penalty is described, late submissions are not allowed and will receive a grade of 0.

**Submissions**All the submissions are online and must submitted through Northwest Online (e-Companion dropbox) before the deadline. Any incorrect or no submissions by the due date will receive a grade of 0. We will grade only your most recent submission.

**Use of Notifications in Canvas**A new Notifications feature has been added to Canvas.  This feature can be used to notify students of various due dates.  We may or may not use this feature during the semester.  However, it is in beta testing, so if we do use it, you will need to consider it a convenience, but not fail-proof.  Specifically, if you are not notified through the Notifications feature of a due date, that is not a justification for submitting an assignment late.  It is your responsibility to adhere to due dates, with or without support from the Notifications feature.

**Grading Criteria (Points are estimates and may vary slightly)**

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| **Components** | **Points** |  | **Grading Scale** | |
| 3 Written Exams @ 100 | 300 |  | 90-100% | A |
| Comprehensive Final Exam | 150 |  | >= 80% and < 90% | B |
| Weekly labs | 100-110 |  | >= 70% and < 80% | C |
| 3 lab exams | 225 |  | >= 60% and < 70% | D |
| Miscellaneous | 0-30 |  | below 60% | F |
| **Total Points** | **775-815** |  |  |  |

Your score on each component will be posted in the online gradebook as soon as that component has been graded.  You are responsible for checking the gradebook at least once a week to ensure that your grades are properly posted.  ***If there is an error in grading, you must bring that to the attention of the class assistant or instructor within one week of the time the grade is posted. Grades cannot be changed after the one-week period.***

For students who have at most one unexcused absence, are on time regularly for class, and behave in a professional manner, the final grade will be curved by 0.5%. For example, 89.5% will be curved to 90%.  Students who have more than one unexcused absence or are late to class more than twice during the semester will not receive this benefit.

**Disclaimer**: This syllabus is subject to change at the discretion of the instructor to accommodate schedule constraints, unexpected semester events, and instructional and/or student needs. It is the sole responsibility of the student to maintain an updated course syllabus.

**Final Exam**The final exam for this class will be given on – Tuesday, December 13, 2016 from 7:30am to 9:30am.