

## COSC 1337 – THE OBJECT-ORIENTED PARADIGM

### Syllabus

#### Catalog Description:

Introduction to the concepts of object-oriented programming to students with a background in the procedural paradigm. Topics covered include a review of control structures and data types, the object-oriented programming paradigm, object-oriented design, an overview of programming language principles, and an introduction to software engineering issues.

#### Text Books:

##### Recommended:

##### **Java Illuminated**

By Anderson, Julie

Edition : 6TH 24

Publisher : JONES+BART

ISBN 13 : 9781284250480

#### Class Times:

COSC1337.001	Lecture: MWF 8:00am-8:55am	COB211
Lecture	Monday, Wednesday	
Lab	Friday	
COSC1337.002	Lecture: TuTh 11:00am-12:20am	COB211
Lecture	Tuesday, Thursday	
Lab	Thursday 11:30-12:20	

#### Grading Policy:

Test/Final Project 60% (20% each)

Programs/Labs 40%

Labs will be due at the end of class period for full credit.

Project online submissions will be due by 11:59PM on designated nights unless otherwise stated.

**No late submissions will be accepted.**

#### Late Submissions and Tests:

Assignments/Labs/Projects/Presentations will not be accepted after the due date.

### **Homework Policy:**

All homework must be self-generated unless otherwise assigned (**i.e NO AI generated work unless assigned specifically**). The use of Java Libraries outside those taught in class will not be used unless for added functionality beyond the purpose of the programming assignment (such as `java.util.ArrayList`, `java.util.LinkedList`, `java.util.Stack`, etc). The purpose of this class is to get the experience and knowledge of how these structures work, rather than how to use libraries that already do the work for you. Use of these libraries before being introduced in class will result in a '0' grade.

Group projects will be submitted individually by each team member to their Canvas portal. Files should all be submitted individually and not in a zip file, as the grading system cannot properly display zip file contents.

**Academic Dishonesty:** You are expected to do your own work. You may assist each other with general concepts, but direct assistance with a particular assignment or any attempts to gain an unfair academic advantage will not be tolerated. Cheating is considered a serious academic offense both by the department and the University. It may result in a failing grade from this course for all parties involved. The instructor reserves the right to ask you to explain any assignment that you turn in to judge if the work is actually yours. AI generated work will not be accepted.

### **Use of Artificial Intelligence (AI)**

You can use AI such as Grok, ChatGPT, etc and websites such as Reddit, W3 Schools, etc. to find code examples for solutions that you "hit a brick wall" when trying to solve. When doing so, you **MUST** do the following for credit:

1. Comment above methods that you import (copy) from outside sources with the issue you were having, a description of this solution, and the source of the solution. If AI generated, include the prompt in the comments
2. Comment on each line of code in the imported method so I can see you understand what is happening (do not just have AI generate the comments. I may have you appear personally to explain how a method works and what individual lines do)
3. Try to rewrite the code into your own style with level-appropriate coding (code that another person at your programming level can easily interpret)

**Failure to follow the above rules will result in your work considered as "plagiarism" and receive a '0'. Repeated plagiarism may result in University disciplinary action.**

**Contact Information:**

**Danny Morris**

Office: COB315.08

Phone: 903-566-7403

E-mail: [danielmorris@uttyler.edu](mailto:danielmorris@uttyler.edu)

Office Hours: MWF 9:00am-10:00am, 11:15am – 12:15pm, 1:30pm – 3:45pm

TTH, 1:00pm-2:00pm (Robotics Team 2:00-5:00)

And by Appointment

**Course Topics:**

Topic	Hours
Review Java programming fundamental, data types	3
Classes	6
Inheritance & Polymorphism	6
File IO & Exceptions	6
Computer Graphics	9
Game logic	9

**Course Timeline:**

Course	<b>COSC1337</b>
Time	<b>Section 001: MWF 8:00am-8:55am Section 002: TuTh 11:00am-12:20pm</b>
Room	<b>COB211</b>
<b>1/12/2026</b>	Intro, Hello World, Procedural vs Object Oriented Design (C vs Java)
<b>1/19/2026</b>	Classes (The heart of Object-Oriented Design).
<b>1/26/2026</b>	Inheritance, Polymorphism
<b>2/2/2026</b>	Abstract Classes, Interfaces
<b>2/9/2026</b>	File Input/Output, Exceptions <b>Test 1</b>
<b>2/16/2026</b>	Graphics using Java Swing
<b>2/23/2026</b>	Graphics using Java Swing
<b>3/2/2026</b>	Game Time - Putting it all Together - Design map, set rules
<b>3/9/2026</b>	<b>Spring Break</b>
<b>3/16/2026</b>	Map Game – Move around Map
<b>3/23/2026</b>	Map Game – Add characters to game
<b>3/30/2026</b>	Map Game – Add items to game
<b>4/6/2026</b>	Map Game – More on Items
<b>4/13/2026</b>	Map Game – Combat, <b>Test 2</b>
<b>4/20/2026</b>	Map Game – How to Win
<b>4/27/2026</b>	<b>Final Project Due</b>

**Course Objectives:**

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1. Choose the appropriate data structure for modeling a given problem.
2. Design, code, test, and debug simple event-driven programs that respond to user events.
3. Explore data input/output with files
4. Explain exception conditions raised during execution.
5. Demonstrate different forms of binding, visibility, scoping, and lifetime management.
6. Defend the importance of abstractions, especially with respect to programming-in the-large.
7. Design, implement, test, and debug simple programs in an object-oriented programming language.
8. Design, implement, and test the implementation of “is-a” relationships among objects using a class hierarchy and inheritance.
9. Explain the relationship between the static structure of the class and the dynamic structure of the instances of the class.
10. Describe how the class mechanism supports encapsulation and information hiding.
11. Explore computer graphics and graphical user interfaces



## **Additional Policies:**

### **Students Rights and Responsibilities**

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <http://www.uttyler.edu/wellness/StudentRightsandResponsibilities.html>

### **Grade Replacement/Forgiveness**

If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the registrar by the 12th day of class. Failure to do so will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates will receive grade forgiveness (grade replacement) for only three course repeats; graduates, for two course repeats during his/her career at UT Tyler.

### **State-Mandated Course Drop Policy**

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the 12th day of class (See Schedule of Classes for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Registrar's Office and must be accompanied by documentation of the extenuating circumstance. Please contact the Registrar's Office if you have any questions.

### **Disability Services**

If you have a disability, including a learning disability, for which you request disability support services/accommodation(s), please contact Ida MacDonald in the Disability Services office so that the appropriate arrangements may be made. In accordance with federal law, a student requesting disability services/accommodation(s) must provide appropriate documentation of his/her disability to the Disability Services counselor. In order to assure approved services the first week of class, diagnostic, prognostic, and prescriptive information should be received 30 days prior to the beginning of the semester services are requested. For more information, call or visit Disability Services located in the University Center, Room 3150. The telephone number is (903) 566-7079. Additional information may also be obtained at the following UT Tyler Web address: <http://www.uttyler.edu/disabilityservices>.

### **Student Absence due to Religious Observance**

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

### **Student Absence for University-Sponsored Events and Activities**

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

### **Social Security and FERPA Statement:**

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.



**Emergency Exits and Evacuation:**

**Everyone is required to exit the building when a fire alarm goes off. Follow your**

**instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do Not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.**