



Norco College

A college of the Riverside Community College District

CIS-17C 33787

Spring 2017, Feb. 13 - Jun. 8

Instructor: Prof. John O'Connor

Office/Phone: N/A

**Class Hours: MW 4:05-5:30PM
W 3:00-3:50PM (LAB)**

Section Code: 33787

Email: john.oconnor@rcc.edu

Office Hours: By Appointment

Class Location: Library, Room LRC

Course Website: www.johnwoconnor.com/cis17c

INTRODUCTION AND WELCOME:

Welcome to CIS-17C: Data Structures Programming in C++. This course presents the essential principles of data structures for the development of computer programs using C++.

PREREQUISITE/ADVISORY:

Prerequisite(s): None

Advisory: CIS 17A or CSC 17A

This course offers a thorough presentation of the essential principles and practices of data structures using the C++ programming language. The course emphasizes abstract data types, software engineering principles, lists, stacks, queues, trees, graphs, and the comparative analysis of algorithms. 54 hours lecture and 18 hours laboratory. (TBA option) (Letter Grade, or Pass/No Pass option.)

COURSE DESCRIPTION:

Before entering the course, students will be able to:

1. Compose, compile and run C++ Object oriented code
 - a. CIS 17A - Apply theoretical gaming, business, scientific, and mathematical concepts in writing and executing programs in the C++ language using Object-Oriented programming methodology.
2. Analyze and understand the Object-Oriented C++ environment.
 - a. CIS 17A - Analyze and understand the Object-Oriented C++ environment.
3. Demonstrate the use of specialized terminology, directives, and features of the C++ language.
 - a. CIS 17A - Apply theoretical gaming, business, scientific, and mathematical concepts in writing and executing programs in the C++ language using Object-Oriented programming methodology.
4. Apply practical and theoretical gaming, business, scientific, and mathematical concepts in writing and executing programs in the C++ language using Object-Oriented programming methodology.

- a. CIS 17A - Apply theoretical gaming, business, scientific, and mathematical concepts in writing and executing programs in the C++ language using Object-Oriented programming methodology.
- 5. Demonstrate specified problem-solving and software design skills using the C++ language
 - a. CIS 17A - Apply theoretical gaming, business, scientific, and mathematical concepts in writing and executing programs in the C++ language using Object-Oriented programming methodology.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, students should be able to:

Analyze and understand the use of data structures in the development of algorithms.

- Critical Thinking - Analyze and solve complex problems across a range of academic and everyday contexts

Design and create C++ programs using stacks, trees, queues, lists and trees.

- Breadth of Knowledge - Understand the basic content and modes of inquiry of the major knowledge fields

Apply practical business processes, theoretical scientific, and mathematical concepts to write and execute computer programs in the C++ language using data structures.

- Application of Knowledge - Maintain and transfer academic and technical skills to workplace
- Critical Thinking - Integrate knowledge across a range of contexts

TEXTBOOK REQUIREMENTS:

- Dale, Nell; Weems, Chip; Richards, Tim. C++ Plus Data Structures. 6th ed.: Jones & Bartlett Learning. ISBN-13: 978-1284089189, ISBN-10: 1284089185

COURSE COMPONENTS

Assignments	Points
12 Homework Assignments (10 points each)	120
11 Lab Activities (10 points each)	110
Midterm	50
Final Exam	100
Total Possible Points	380

Course Grade Calculation	
90% or more	A
80% – 89%	B
70% – 79%	C
60% – 69%	D
Less than 60%	F

LAB ASSIGNMENTS

All students are required to complete lab activities as part of the CIS 1A curriculum. As described in the college schedule and catalog, this course includes 18 hours of lab to be completed outside of class. Lab assignments are to be turned in via Blackboard. **All late lab assignments will receive a 50% reduction in credit (1/2 credit)**

HOMEWORK AND APPLICATION ASSIGNMENTS

Homework will be assigned weekly and is due on the date listed in the course schedule. All homework must be turned in on time at the beginning of class. **All late homework assignments will receive a 50% reduction in credit (1/2 credit).**

CHANGES TO SYLLABUS

This syllabus may change at any time. Changes will be posted or distributed during any class session. It is the responsibility of the student to keep track of syllabus changes and assignments.

CLASSROOM POLICIES

IF YOU ARRIVE LATE TO CLASS, PLEASE DO NOT DISTURB OTHER STUDENTS.

Last day to add: 02/24/2017

Last day to drop with a refund and without a W: 02/26/2017

Last day to drop without a W: 02/26/2017

Last day to drop with a W: 05/12/2017

ADDING THIS CLASS

Students wanting to add this section will need to be provided with a four digit add/authorization code. If you receive an add authorization code, you are responsible for completing the add process **before** the deadline to add. This deadline can be found in the Schedule of Classes available online. Add codes can be processed through your WebAdvisor account. **If you fail to add the class by the deadline, you are not officially enrolled and college policy prohibits you from continuing to attend class.**

Be aware that your failure to pay fees/fines, to document prerequisites, to clear academic holds, or to navigate personal problems may hinder you from adding this section. Please allow sufficient time to take care of these issues **before the deadline to add**. Adding this course after the published deadline will require documented extenuating circumstances involving severe illness, accident, or death.

The use of an add/authorization code issued to another student violates the Student Code of Conduct and the student will be referred to the Dean of Student Life for disciplinary action. The unauthorized use of an add code is grounds for removal from the course.

DROPPING THIS CLASS

You may withdraw from this course by using WebAdvisor prior to the drop deadline. The deadline is available on WebAdvisor by selecting "My Class Schedule/Deadlines" after logging in. If there is a hold restricting use of WebAdvisor for this purpose, you may bring a completed ADD/DROP card to the Admissions counter of the college and complete the process there. It is the student's responsibility to drop this class should he/she decide no longer to attend.

ACADEMIC INTEGRITY:

Norco College is committed to maintaining academic integrity throughout the college community. Academic dishonesty is a serious offense that can diminish the quality of scholarship, the academic environment, the academic reputation and the quality of a Norco College degree. The Student Handbook states:

In cases of academic dishonesty by a student, a faculty member may

- 1) Reduce the score on test(s) or assignment(s);

- 2) Reduce the grade in the course;
- 3) Fail the student in the course if the weight of the test(s) or assignment(s) warrants course failure;
- 4) Recommend suspension from the course (see further details in Student Handbook).

Academic dishonesty includes but is not limited to:

- a) Plagiarism – the intentional presentation of words, ideas or work of others as one’s own. This includes but is not limited to: copying homework, using a work or portion of a work written or created by another but not crediting the source and using one’s own work completed in a previous class for credit in another class without permission. The usual consequence of academic dishonesty is failure of the course and referral of the case to the appropriate dean for additional disciplinary action. Students may discuss assignments but are expected to complete all work independently.
 - b) Cheating During Examinations – includes, but is not limited to, unauthorized electronic assistance or devices, copying from another, looking at another student’s exam and opening books when not authorized.
- Any of these practices could result in charges of academic dishonesty.

CIS/GAM Lab:

As a member of this class, you are required to attend the CIS/GAM lab each week. At the lab you will supplement the learning in the primary classroom through assignments generated by your instructor. In addition you have the opportunity to interact one-on-one with a CIS/GAM faculty member. All CIS/GAM lab classroom policies and procedures are covered in the contract for that area. You will fill out the contract in the CIS/GAM lab classroom during the first week of classes. Please report to the CIS/GAM lab in the Learning Resource Center (LRC) according to the day and time you select during your orientation.

ACCOMMODATIONS FOR DISABILITIES

Norco College provides services to students with disabilities through the Disability Resource Center (DRC); located in the Center for Student Success Building. To request academic accommodations due to a disability, please visit the DRC or contact the DRC staff at 372-7070. A DRC staff member will confidentially review your concerns with you to determine any required accommodations. Once your accommodations are approved through DRC, please bring your DRC documentation(s) to me so that we may discuss your accommodations.

Violence on Campus

Norco College does not tolerate any violence or implied violence. A threat of violence includes any behavior that by its very nature could be interpreted by a reasonable person as intent to cause physical harm to self, another individual, or property. Violence or the threat of violence against or by any **student** or employee of the District or any other person is unacceptable **and will not be tolerated**. Should an individual on District property, who is not an employee or student, or a student or employee of the District, demonstrate or threaten violent behavior, s/he may be subject to criminal prosecution (AP 3510 Workplace Violence and Safety).

If you are a victim of any violent, threatening, or harassing conduct, any witness to such conduct, or anyone receiving a report of such conduct, [. . .] shall immediately report the incident to his/her supervisor of College Safety and Police (951- 222-8171) (AP 3510 Workplace Violence and Safety).

DECLARING A PROGRAM OF STUDY

Declaring your Program of Study in WebAdvisor is important. Norco College contacts students that have declared a certificate/degree for internships and job opportunities in that specified field. Also, by declaring your certificate/degree goal, you can use the “Academic Review” tool in WebAdvisor which will calculate exactly what classes you still need to take to finish your certificate/degree and graduate. If you have questions about a field of study, please schedule an appointment with a counselor to discuss this important issue.

STUDENT SERVICES

Norco College offers excellent services for all students. These services include help with disability accommodations, financial aid, finding jobs, academic counseling, health services, veterans services, tutoring and more. Here is a partial list of resources available to you:

- **Disability Resource Center (DRC)**, Center for Student Success, (951) 372-7070, drc@norcocollege.edu
- **Veterans Services**, Student Services Building, First Floor, (951) 372-7142, veterans.services@norcocollege.edu
- **Student Support Services**, Student Services Building, (951) 372-7149, Hortencia.Cuevas@norcocollege.edu
- **EOPS/CARE**, (Extended Opportunity Programs and Services/Cooperative Agencies Resources for Education), Center for Student Success, (951) 372-7128, eops@norcocollege.edu
- **CalWORKs** (California Work Opportunity and Responsibility for Kids), Center for Student Success (951) 372-7052, norcalworks@norcocollege.edu
- **Learning Resource Center (LRC)**, Wilfred J. Airey Library, First Floor, (951) 739-7896, lrc@norcocollege.edu
- **Student Health and Psychological Services**, Wilfred J. Airey Library Building, Lower Level, (951) 372-704, lisa.mcallister@norcocollege.edu
- **Student Financial Services**, Student Services Building, First Floor, (951) 372-7009, Maria.Gonzalez@norcocollege.edu

Special Programs:

- **Honors Program**, Ana-Marie Olaerts, (951) 739-7815, Ana-marie.olaerts@norcocollege.edu
 - **John F. Kennedy Middle College High School**, Cheryl Kretz, Counselor, (951) 738-2200, ckretz@cnusd.k12.ca.us
 - **Puente**, David Payan, Puente Counselor, (951) 372-7080, david.payan@norcocollege.edu
 - **Study Abroad**, Jan Schall, Director, (951) 222-8340, jan.schall@rcc.edu
 - **Talented Tenth (T3P)**, John Moore, T3p Counselor, (951) 372-7148, John.Moore@NorcoCollege.edu
 - **STEM SCHOLARS (science, technology, engineering, and mathematics) SCHOLARS** 951-739-7803, STEM@norcocollege.edu
 - **Tutorial Services**, lower-level of Library building, (951) 372-7143
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Especially for online courses

FOR TECHNICAL ASSISTANCE

The 24/7 help desk number for all student and instructor Blackboard-related issues, including streaming media, is **(866) 259-7271**. There is also a new online support portal URL students and instructors can use: <http://bbcrm.edusupportcenter.com/ics/support/default.asp?deptID=8077>. The District Help Desk for computers, software, etc., is (951) 222-8388. For WebAdvisor assistance, please contact Admissions & Records at 951-372-7003.

Academic honesty is as highly valued at the Online campus, as it is at Norco College's face-to-face classes. A student must always submit work that represents his or her original words or ideas. If any words or ideas are used that do not represent the student's original words or ideas, then the student must cite all relevant sources. The student should also make it clear the extent to which such sources are used. Words or ideas that require citations include, but are not limited to, all hardcopy or electronic publications, whether copyrighted or not, and all verbal or visual communication when the content of such communication clearly originates from an identifiable source. At the Online campus, all submissions to any public meeting or private mailbox fall within the scope of works and ideas that require citations if used by someone other than the original author. Academic dishonesty in an Online learning environment could involve the following:

- Having a tutor or friend complete a portion of your assignments
- Having a reviewer make extensive revisions to an assignment
- Copying work submitted by another student to an online venue
- Using information from on-line information services without proper citation