Professor: Zenia Laxa
E-mail:

- College email: zlaxa@napavalley.edu
    - Subject MUST include COMS 216
    - I check email in the mornings
- Blackboard Message: I check blackboard messages daily.

Availability:

- I am online Sundays from 7pm-9pm
- I will be on campus in Room 1432 on Mondays 6-630pm to answer questions, sign papers, etc.

Catalog Description: Application of software engineering techniques to the design and development of large programs; data abstraction and structures and associated algorithms.

REQUIRED Text/Materials/Web:

- Paperback or eBook: C++ Programming, From Problem Analysis to Program Design, 7th Edition, D.S. Malik, ISBN-10: 1285852745, ISBN-13: 9781285852744
- Materials: USB Flash Drive
    - Create a folder called COMS 216
- Student Data Files:
    - Files will be distributed weekly (if applicable) and can be found within the Chapter folders
- Blackboard: Our class will be held online via Blackboard.
    - Go to https://napavalley.blackboard.com/
    - Logon and go to our COMS 216 Course
- CCC Confer:
    - Our virtual classrooms will be hosted here: https://www.cccconfer.org/
    - Links will be available weekly
- C++ Software REQUIRED (The library has PCs with the software installed):
    - FOR PC USERS: Codeblocks – MUST INSTALL (Instructions/procedures will be provided the first day of class).
    - FOR MAC USERS: XCode – MUST INSTALL (Instructions/procedures will be provided the first day of class).
- Handouts/copies from other textbooks/sources

Student Learning Outcome: Demonstrate application of advanced programming techniques and development of large programs.

Course Objectives: Upon completion of this course, the student will be able to:

1. Write programs that use each of the following data structures: arrays, records, strings, linked lists, stacks, queues, and hash tables.
2. Implement, test, and debug simple recursive functions and procedures.
3. Evaluate tradeoffs in lifetime management (reference counting vs. garbage collection)
4. Explain how abstraction mechanisms support the creation of reusable software.
5. Design, implement, test, and debug simple programs in an object-oriented programming language.
6. Compare and contrast object-oriented analysis and design with structured analysis and design.

*SYLLABUS SUBJECT TO CHANGE

Grading:

Total points computed as follows. The total points for individual items may vary.

Weekly programs:	100 (20 Examples @ 5 points each)
Midterm:	150
Final Project:	250
Assignments:	500 (5 Programs @ 100 points each)
Total:	1000 Points

Point System: 1000 total assigned points

A>= 900

B>= 800

C>= 700

D>= 600

F<= 599

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Course Policies:

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Attendance: "Regular attendance in all classes is important for satisfactory academic progress. The Napa Valley College attendance regulations make provisions for a limited number of unavoidable absences. However, a student who is absent for as many times as a class meets each week will have exhausted this provision. An instructor may request verification of those absences. Further absences may cause the instructor to drop the student from the class. Students who do not attend the first class meeting may be dropped or lose priority on the waiting list."NVC CATALOG 2013-2014

Missed Classes: It is the student's responsibility to obtain the assignments and the accompanying instructions on an individual basis if he/she is absent when an assignment is given. Missed or late exams cannot be made up. Please e-mail Professor via Blackboard if you will be missing class. I check e-mail right before class and on weeknights.

Dropping the Course: Dropping the course is a responsibility of the student. Otherwise the student will receive an F grade. Changing to/from Credit/No Credit status is also the responsibility of the student. An incomplete can only be assigned if a written contract is made between you and the instructor. If you decide not to continue the course, drop through WebAdvisor (read 'Last day to drop without a "W"' and 'Last day to drop with a "W"' deadline in the current edition of the Napa Valley College Class Schedule. In addition, a student who has not attended (or logged in for ONLINE sections) the first day of class, may be dropped at the Instructor's discretion or for other reasons listed in the Attendance Policy above.

Assignments: All assignments are due by 1159PM the following Sunday in which they are assigned. Review the calendar for specific assignment information. Late work is not accepted.

Exams: Makeup exams are not given. Exams will be given on the date/time listed on the calendar (unless told otherwise by the Instructor). Please be prepared by reading the assigned chapters.

Napa Valley College's Academic Honesty Policy S6330: "Napa Valley College values integrity, honor, and respect in all endeavors, both personally and professionally. Thus, the faculty at Napa Valley College wishes to help our students maintain the highest academic standards of honesty; therefore, it is expected that a student's academic work be of his/her own making. In spite of the increased use of collaborative learning and other forms of group work (e.g., labs, study groups, group projects), it is important that each student remain accountable for his/her own work, whether it be work individual or group assignments or tests. We recognize that the vast majority of students maintain highly ethical

work standards; however, failure to abide by this standard of conduct is considered to be academic dishonesty."
http://napavalley.edu/academics/OnlineEd/Pages/AcademicHonestyInOnlineCourses.aspx
http://napavalley.edu/studentaffairs/SRR/Pages/AcademicHonesty.aspx

Consequences of Academic Dishonesty: "Upon the first infraction of academic dishonesty, the instructor may do one or more of the following:

- Give a lower or failing grade on the assignment or exam;
- Refer the student to the Vice President of Student Services for student disciplinary action.

In the event of a second infraction, upon consultation with the division chair, the instructor may do one or more of the following:

- Fail the student from the course;
- Refer the student to the Vice President of Student Services for student disciplinary action.

If the student believes he/she is unjustly accused, he/she may appeal the decision to the Vice President of Instruction, or follow the student grievance process through the Office of Student Services."
http://napavalley.edu/studentaffairs/SRR/Pages/AcademicHonesty.aspx

Environmental Sensitivity Statement: The faculty senate encourages faculty to include the following statement in course expectations/requirements/syllabi: "Some NVC students, staff and faculty are seriously impaired by environmental illness or Immune Dysfunction Syndrome. They can experience breathing problems, headaches, sudden fatigue, mood swings, or memory lapses when exposed to perfumes, soaps, scented sprays or lotions, chemicals, tobacco smoke, or dust. Your sensitivity to the problem is extremely important, because by minimizing the use of strongly scented soaps, perfumes, and other products, we can help those affected. Thanks very much for your cooperation.

Disability Support Programs and Services (DSPS): As a college student with a documented disability, you have the right to "reasonable accommodations based upon your educational limitations" under Title 5 of the California Education Code and Section 504 of the Rehabilitation Act of 1973. Provisions of the law state that "No otherwise qualified person with a disability in the United States shall, solely by reason of disability, be denied the benefits of, be excluded from participation in, or be subject to discrimination under any program or activity receiving federal financial assistance." To contact DSPS and get more information about our program, you may call 707-256-7345. You can also stop by the DSPS office, located in Building 1700, Room 1766 on the Napa Valley Main Campus.
http://napavalley.edu/studentaffairs/DSPS/Pages/default.aspx

Anti-Discrimination Statement: In accordance with Napa Valley College Board Policy D1130, the Student Code of Conduct, and applicable state and federal laws, discrimination or harassment based on gender, gender identity, race, nationality, ethnicity, religion, sexual orientation, or disability is prohibited in any form. Students are encouraged to participate fully in class discussions and to engage other students and the instructor in honest productive discussions. All interactions online shall be professional and respectful.

Assignment and Exam Grades: Scores are distributed throughout the semester. Once scores are released, please keep track of your own grades.

End of the semester course grades: Final class grades will be available to review through the Napa Valley College Web Advisor system at http://www.napavalley.edu/WebAdvisor . Please allow adequate time for processing.

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Calendar (Subject to change):

Week	Start	Topic	Weekly Example Programs	Assignment	Final Project	Due
1	3/20	Introductions (Syllabus, Blackboard, Student Data Files) Chapter 10 Classes and Data Abstraction	Chapter 10 Example 10-2 pages 665-667 Chapter 10 Example 10-8 pages 689-691 Chapter 10 Example 10-9 pages 691-693 Chapter 10 Programming Example: Juice Machine pages 705-718	- Purchase Text and Materials - Read Chapter 10 - Install Code Blocks/Xcode		3/26
2	3/27	Chapter 8 Arrays and Strings	TBD	TBD		4/2
3	4/3	Chapter 16 Searching, Sorting	TBD	TBD		4/9
4	4/10	Chapter 12 Pointers, Classes, Virtual Functions, and Abstract Classes	TBD	TBD		
5	4/17	Chapter 13 Overloading and Templates	TBD	TBD		
6	4/24	Chapter 11 Inheritance and Composition	TBD	TBD		
7	5/1	Chapter 15 Recursion	TBD	TBD		
8	5/8	Chapter 17 Linked Lists	TBD	TBD		
9	5/15	Chapter 18 Stacks and Queues	TBD	TBD		
	5/20	Last day of class		Final		

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