CIS 236 – Programming in C
Fall 2021

JOLIET JUNIOR COLLEGE 1901

INSTRUCTOR INFORMATION

Pam Dunn

Email: padunn@jjc.edu, or iCampus email

You can generally expect a reply from me within 24 hours, Monday through Friday. If you contact me in the evenings (Monday through Thursday), I will not reply until the next day. If you contact me on weekends (Friday evening through Sunday evening), or on holidays, I will not reply until the next business day.

Do not ask time-sensitive questions via the comments in a homework dropbox, or on the course discussion board. If you need a reply quickly, use email.

Virtual Office Hours To be determined. I will not be on campus regularly this fall.

COURSE INFORMATION

Description

A study of the C programming language. Topics to be covered include program planning, program design methods, C language procedures, efficient C programs, and reliable data structures. To demonstrate programming skills, the student will write several C programs which meet the needs of a variety of business, scientific and systems applications.

Illinois Articulation Initiative (IAI) Number

None

Credit and Contact Hours

4 Lecture/Demonstration
Lab/Studio
4 Credit Hours

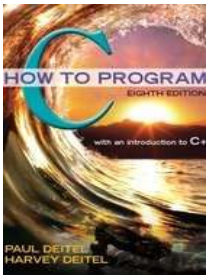
Prerequisites

CIS 130 or CIS 136; CIS 136 strongly recommended

Required Textbooks/Reading List

C How to Program
Author: Deitel
Publisher: Pearson
Edition: 8th
Paperback ISBN: 9780133976892
eBook: 950136413514157

Note that this textbook is available electronically via Redshelf. The Redshelf link is available in our Canvas class site in the navigation to the left of the course content.



Required Software

Dev-Cpp C++ IDE – Available as a free download

Required Supplementary Materials

Regular access to a computer with Internet; access to storage medium or JJC student free online storage

Technical Requirements

- Daily reliable internet access
- A modern web browser (Canvas-based courses work best with Google Chrome). The latest information on Canvas supported browsers is available on the Canvas community website.
- Courses may be accessed using the Canvas App, available from the Google Play Store or the Apple App Store. Not all features of every course will work using the App. It may be necessary to access a web browser when using a mobile device.

Methods of Instruction

Lecture and hands-on demonstrations

General Education Student Learning Outcomes

- Quantitative Literacy – Students possess the ability to reason and solve quantitative problems from an array of contexts.
- Applied Knowledge – Students draw from learning experiences/concepts to solve a variety of problems or challenges.

Course Content Student Learning Outcomes

- Six to eight C programs of increasing difficulty must be explained, coded, compiled, debugged, tested and documented.
- Discuss the development of the C programming language. This will include the past, current and future uses of the C language.
- Analyze problems in order to identify alternative solutions and select the solution demonstrating the greatest degree of efficiency and usability.
- Use various structured techniques to provide a C language solution to a problem.
- Demonstrate the use of increment/decrement operators, control flow techniques, functions, pointers, arrays, structure, arrays of structures, file access, and the use of C language compiler.

HOMEWORK & HOMEWORK POLICIES

Graded Assignments

15 homework assignments @ 20 points each	300 points (65% of total course grade)
15 quizzes @ 5 points each	75 points (16% of total course grade)
15 participation assignments @ 5 points each	75 points (16% of total course grade)
1 course orientation quiz	10 points (2% of total course grade)

Total Points for Course **460 points**

Homework and Homework Submission

Homework assignments are source code files submitted via JJC's course management system.

All homework assignments must be submitted via JJC's course management system. No homework assignments are accepted via any other method unless authorized by the instructor prior to submission.

You may resubmit any assignment at any time before the dropbox for that assignment closes. After the dropbox is closed, you may resubmit an assignment only with permission from the instructor.

Specialized plagiarism detection software is not used in this course.

Quizzes and Quiz Submission

Quizzes are taken online via JJC's course management system. All quizzes must be submitted via JJC's course management system. No quizzes are accepted via any other method unless authorized by the instructor prior to submission.

Quizzes are open book and cover the material in the current module.

Quizzes are not timed. You can save your progress and return to the quiz before the due date. You may submit a quiz only once.

Course Orientation Quiz

The course orientation quiz is required to unlock the assignments in the course management system.

You must score 100% on the course orientation quiz before any course content, including homework assignments and quizzes, will be available to you. You may take the orientation quiz as many times as necessary.

Participation Policy and Activities

Your regular participation in the activities of the course is vital to your success. This includes participating in live lectures, reviewing lecture recordings, downloading and reviewing all learning materials, submitting homework regularly and on time, and submitting quizzes regularly and on time.

You will be graded on your participation in this course. Participation is worth 75 points, or 16% of your final grade.

During every lecture, a question will be announced for that week that you must answer on the course discussion board during that week. You are encouraged to reply to the posts made by your classmates.

Due Dates

All graded assignments are due at 11:59pm on the due date listed in the course management system.

Late Homework

No late homework is accepted.

Late Quizzes

No late quizzes are accepted.

Late Participation Activities

No late participation activities are accepted.

Extra Credit

There may be extra credit points available in the form of participation activities, extra features on some required assignments, extra assignments, and extra credit questions on quizzes.

Homework Completion

You are required to complete all assignments and quizzes to successfully complete the course.

YOU WILL HAVE TO DO A SIGNIFICANT AMOUNT OF WORK ON YOUR OWN TIME.

Each programming assignment should take 3–4 hours to complete. Each quiz should take about 30 minutes. Discussion board questions should take 10-15 minutes.

Grading Scale

Grade	Final Percentage	Points
A	90–100%	414 and above
B	80–89%	368–413
C	70–79%	322–367
D	60–69%	276–321
F	below 60%	275 and below

Grading Expectations

All assignments are graded during the week after the assignment closes for submissions. Comments explaining any point deductions are always included with your grade, and are located in the homework dropbox, or in the quiz.

Final Exam, Major Tests and Quizzes

There will not be a midterm exam, a final exam, or other major exams in this class. There will be weekly quizzes. Quiz material is developed primarily from lecture material and homework assignments. Quizzes are open-book, and open-notes.

CLASS POLICIES AND PROCEDURES

General Class Policies

- Always be respectful of your instructor and fellow classmates.
- All personal electronic devices, including phones, must be silenced during live lecture presentations and other virtual group activities.

Due Date Extensions

Approved Joliet Junior College Activities

If you cannot complete a homework assignment or quiz or cannot participate in the course activities for the week due to participation in an approved JJC activity, **you must submit written authorization from your JJC instructor/coach/club advisor**. Extensions for homework, quizzes, or participation activities due to participation in an approved JJC activity will be given at the discretion of the instructor.

Extensions due to Medical Reasons

If you cannot complete a homework assignment or quiz or cannot participate in the course activities for the week due to a medical reason, **DO NOT send me a doctor's note or any other personal medical documentation**. I am not allowed to look at your medical documentation. Extensions for homework, quizzes, or participation activities due to medical issues will be given at the discretion of the instructor, with notification from the Office of Student Rights and Responsibilities.

Covid-19

If you or one of your direct household family members is diagnosed with COVID-19, please contact the Office of Student Rights & Responsibilities for assistance in completing your course, understanding your options, and supportive services.

Assignment Make-Up Policy

Homework assignments, quizzes, and participation activities may be made up at the discretion of the instructor.

Academic Honor Code

The objective of the academic honor code is to sustain a learning-centered environment in which all students are expected to demonstrate integrity, honor, and responsibility, and recognize the importance of being accountable for one's academic behavior.

High ethical standards are the highest priority to Joliet Junior College. Therefore, academic dishonesty will not be tolerated. Academic dishonesty is defined to include cheating, plagiarism and theft or other abuse of computer time.

Cheating

Cheating includes copying answers, stealing, or disseminating tests or answer keys, using someone else's data in preparation of reports or assignments, and assisting others in such practice.

Plagiarism

Plagiarism is the presentation of another person's words, ideas, or work as one's own. It includes copying any material (written or non-written) without proper acknowledgement of its source and paraphrasing another's work or ideas without proper acknowledgement.

In this class, plagiarism includes, but is not limited to:

- **Submitting someone else's assignment—in whole or in part—as your own work.**
- **Providing your assignment to another student—in whole or in part—who then submits it as their own work.**
- **Copying files from any unauthorized source—in whole or in part—and submitting it as your own work.**
- **Using any online resource to download homework solutions or quiz answers.**
- **Paying another person to complete your homework and then submitting it as your own work.**

DO NOT COPY CODE OR FILES FROM THE INTERNET.

DO NOT COPY CODE OR FILES FROM ANOTHER PERSON, WHETHER THEY ARE IN THIS CLASS OR NOT.

PLAGIARISM WILL NOT BE TOLERATED.

Theft or Other Abuse of Computer Time

Theft or other abuse of computer time includes, but is not limited to:

- Unauthorized entry into a file, to use, read, or change the contents, or for any other purpose.
- Unauthorized transfer of a file.
- Unauthorized use of another individual's identification or password.
- Use of computing facilities to interfere with the work or another student, faculty member, or college official.
- Use of computing facilities to send obscene or abusive messages.
- Use of computer time for personal or business purposes. Unauthorized use or copying of copyrighted software.

Any form of academic dishonesty as defined by the faculty member or department is a serious offense requiring disciplinary measures. Discipline for academic dishonesty involving a specific course shall be determined first by the instructor of the course and may include failure of the specific assignment, project, or test, or failure of the course. The student may appeal the instructor's decision to the Department Chairperson. In case of academic dishonesty, the faculty-assigned grade supersedes a student-initiated withdrawal. In cases where disciplinary measures beyond course failure may be deemed appropriate by the instructor or Department Chairperson, the student may be disciplined with the involvement of the appropriate dean.

Any violation of the academic honor code will result in a zero for that assignment.

You will also be reported for further disciplinary measures, which may include being dropped from the course.

COLLEGE POLICIES

On-Campus Covid-19 Policies

Masks will be required in all common areas including classrooms and labs. Be sure to wear your mask properly, covering your nose and mouth. If you do not have a mask, you can get one for free when you receive your temperature check as you enter the building. Learn more about masking and COVID-19 precautions at JJC's COVID information page.

College Statement about grades of 'F' and withdrawal from class

Students may withdraw from a course by processing an add/drop form during regular office hours through the Registration and Records Office at Main Campus or Romeoville Campus, or by phone at 815-744-2200. Please note the withdrawal dates listed on your bill or student schedule. Every course has its own withdrawal date. Failure to withdraw properly may result in a failing grade of F in the course.

At any time prior to the deadline dates established, an instructor may withdraw a student from class because of poor participation, poor academic performance, or inappropriate academic behavior, such as, but not limited to, cheating or plagiarism.

Intellectual Property

Students own and hold the copyright to the original work they produce in class. It is a widely accepted practice to use student work as part of the college's internal self-evaluation, assessment procedures, or other efforts to improve teaching and learning and in promoting programs and recruiting new students. If you do not wish your work to be used in this manner, please inform the instructor.

Student Code of Conduct

Each student is responsible for reading and adhering to the Student Code of Conduct as stated in the college catalog.

Sexual Harassment

Joliet Junior College seeks to foster a community environment in which all members respect and trust each other. In a community in which persons respect and trust each other, there is no place for sexual harassment. JJC has a strong policy prohibiting the sexual harassment of one member of the college community by another.

Course Commitments – Faculty

I am committed to providing a quality learning experience through thoughtful planning, implementation, and assessment of course activities. I am also committed to being readily available to students throughout the semester by

returning e-mails and phone calls within 24 to 48 hours and by returning graded course work within 1 to 2 weeks. Furthermore, I am committed to selecting appropriate course materials and making them available in an organized and timely manner in the online course management system.

Course Commitments – Student

By registering for this course, you commit yourself to self-motivated study, participation in course activities, and the submission of all assignments and exams on time. Furthermore, you commit to accessing the course site and checking your JJC e-mail at least four times a week. Since this is a 4-credit hour course offered during a 16-week semester, you commit to spend a minimum of 12 hours per week on this class.

Introduction to Online Learning

The Introduction to Online Learning course is a requirement for all first-time online learners. This orientation is available to students in the Courses tab found on your iCampus home page from the first day that you are registered in an online or hybrid course.

Others with Access

Individuals such as guest speakers, course evaluators, and technical support staff may access the course site when necessary and/or appropriate.

Responsible Use Policy

Students are responsible for knowing and following the terms and conditions of JJC's policy for Responsible Use of Information Technology.

Copyright

This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine and the TEACH Act in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder. These materials are provided as an open educational materials through UCF BlendKit Toolkit resource under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.

Third-Party Software and FERPA

During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these are required assignments, you need not make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identifiable/sensitive information. If you have any concerns about this, please contact your instructor.

Communication Standards

Proper spelling, grammar, and netiquette are expected in all course communication. Writing should be in complete sentences, use punctuation, and be formatted at a level consistent with college expectations. All interactions and communications within the course should be mindful of tone and reflect how others may interpret your message. Asking questions and seeking clarification is acceptable and encouraged but must be done in a polite and civil manner. This policy applies to all forms of communication.

Privacy and Accessibility Policies

Canvas	Accessibility	Privacy
Adobe Reader	Accessibility	Privacy
Microsoft Office	Accessibility	Privacy

SERVICES FOR STUDENTS

Disability Services

http://www.jjc.edu/student-resources/disability-services

Joliet Junior College values diversity and inclusion; we are committed to a climate of mutual respect and full participation by providing an accessible learning experience for all students. If you are a student with a disability, you ae encouraged to contact Disability Services at the office location, phone, or e-mail address provided below to establish accommodations under the Americans with Disabilities Act, Rehabilitation Act Section 504, and 508. If you are a student with a disability and anticipate or experience physical or academic barriers, please let your instructor know immediately so that options for accessibility can be discussed. Please be aware that the accessible table and chairs in this classroom should remain available for students who find that standard classroom seating is not accessible. Be cognizant of those around you and respect the learning and physical access needs of your fellow classmates.

Office Location: A-1125
Phone: (815) 280-2613
Email: disabilityservices@jjc.edu

Tutoring and Learning Center

http://www.jjc.edu/student-resources/tutoring-learning-center

JJC offers a number of free tutoring services on campus and online (Smarthinking). Many of these services are conveniently located in the Tutoring and Learning Center (TLC). Tutoring services are also available at City Center Campus and Romeoville Campus. Call to schedule an appointment. A link for Smarthinking, our free online tutoring service, is also available on this course's homepage.

Office Location: C-2010
Phone: (815) 280-2730
Email: tutoring@jjc.edu

Student Advising Center

https://www.jjc.edu/student-resources/student-advising-center

The advisors at Joliet Junior College provide prospective, current, returning, and reverse transfer students with a variety of services. These services include educational planning and academic advising, transfer planning, major/career planning, and personal concerns.

Office Location: A-1155
Phone: (815) 280-2763
Email: academicadvising@jjc.edu

Student Resources

http://www.jjc.edu/student-resources

Information on Testing Services, Academic Standards of Progress, Bookstore, Career Services, Disability Services, Library, Multicultural Student Affairs, Project Achieve, Records & Transcripts, Student Rights, Student Accounts & Payments, Tutoring & Learning Center, Veterans Resource Center, Wellness Advocates, and more.

MyJJC

http://my.jjc.edu/

JJC portal providing access to many JJC services.

Technical Support

For technical assistance, visit the 24/7 Student Support page where you may find a solution to your problem, as well as support through phone and e-mail. Technical support is available through the 24/7 iCampus Student Support Line at

815-280-6699 or by submitting a support request. Assistance is also available in the iCampus Center in Room J-4019 on the main campus, by calling 815-280-2481, or through email iCampushelp@jjc.edu.

My Degree Progress

My Degree Progress is a computerized system to track a student's progress toward graduation. The report indicates every course and places these courses into their appropriate category as a General Education, Major Course, or Elective, according to the degree requirements. This tool is useful for preparing before an advising appointment, for planning, for registering, and for checking that the student is on track for graduation. https://eresources.jjc.edu

Student Planning Tool

The Student Planning Tool combines degree audit information and upcoming schedule of classes so students can easily plan and register for courses that fulfill degree or certificate requirements. Student Planning builds on My Degree Progress and allows JJC students to chart a clear path to graduation in partnership with their Advisor to create an educational plan mapping out their path to completion. Student planning is a web-based self-service tool that makes it easy to know what classes are needed for your degree or certificate and in which semester to take them. For questions about Student Planning visit the Student Advising Center at the Main, Romeoville, or City Center campuses or call 815-280-2673.

TOPICAL OUTLINE

Week	Topic
1	Introduction to the C language; a C overview; reasons for C's popularity
2	Words of the C language; identifiers, data types: int, char, short, long, unsigned, float, double, derived data types, constants, integer, float, character, string
3	Expressions; operator forms; operator categories: arithmetic operators, automatic operators, assignment operators, relational operators, logical operators, operator evaluation
4	Creating a C program; how a C program runs, output; the source file: parts of a typical C course file; type of statements; blocking; the C compiler: preprocessor; multiple passes; assembler; link editor input and output: elementary i/o—getchar and putchar; formatted i/o—scanf and printf
5	Control statements; structured programming; conditional constructs; iteration; combining constructs; multiple branching--the switch statement; break
6	More on expressions; compound assignments; conditional operators: expression separator; operator precedence
7	Conversion between data types; conversion events; rules for implicit conversion; explicit conversions: type cast
8	Arrays; declaring arrays; array storage; referencing an array or element; initializing an array; multidimensional arrays; string processing
9	The preprocessor; symbolic constraints; macros; file inclusion, library routines, and header files; conditional compilations; line control; typedef
10	Pointers and addresses; declaring a pointer; initializing a pointer; referencing pointer data; pointer arithmetic and scaling factors; string processing using pointers; pointers and arrays
11	Functions; defining a function: calling a function; format; return from a function; referencing functions: format; evaluations by passing arguments; call by reference; call by value; passing array elements; declaring a function; the "main" function: arguments to main; argc; argv; envp; recursive functions; function arguments vs. macros
12	Input/Output library functions; standard library; the file type: file open and close
13	the standard i/o header file stdio.h; character i/o functions; string i/o functions; formatted i/o functions; record i/o functions
14	Storage classes; how a storage class defines an identifier: scope; life of identifier; initialization values; implicit values; explicit values; automatics; register; external; static: internal; external

15	Process library functions; how libraries are found and linked; the C standard library: header files; including the standard library; the exit system call; string manipulation functions; math functions; conversion functions character classification macros

The instructor may change this schedule at any time.

Effective Date: 01-Aug -2011

Signature of Department Chair: _____

CID: 1769