## Kishwaukee College Syllabus CIS 111 - 3001 Logic and Program Design 3 Credit Hours, Fall 2016

#### A. Course Description

An introduction to programming designed to introduce common programming concepts to prepare for traditional programming courses. The topics to be covered include structured programming concepts, flowcharts, pseudocode, number systems, Boolean logic, file processing, interactive input and output, an overview of assembly language, and an introduction to object-oriented programming concepts. Students will be expected to solve some problems using a programming language. Three hours lecture/discussion a week.

Prerequisite: None.

#### B. Meeting Time and Place

Lecture/Lab: A-1374

Time: 11:00 A.M. - 12:15 P.M. Tuesday, Thursday

Dates: 8/30/16 - 12/22/16

Withdrawal date: 12/05/16

Labor Day:9/5/16School closedFall Friday:10/21/16School closedThanksgiving break:11/23/16 5:00 PM - 11/26/16School closedMidterm exam:10/25/16during class

Final exam: 12/20/16 10:00 A.M. - 11:50 A.M.

## C. Instructor Information

Instructor: David G. Klick

Office: A-1342

Email: David.Klick@kishwaukeecollege.edu

Phone: 815/825-9337

Website: <u>kermit.kishwaukeecollege.edu/~dklick/</u>

Backup website: <a href="mailto:klickfamily.com/david/school/">klickfamily.com/david/school/</a>
Desire2Learn: <a href="https://kish.desire2learn.com/">https://kish.desire2learn.com/</a>

Dept. Secretary: 815/825-2086 x2030 (Shelley Lawson)

Office hours: M 10:00 A.M. -11:00 A.M.

T 1:45 P.M. - 2:30 P.M., 5:15 P.M. - 6:00 P.M.

W 10:00 A.M. - 11:00 A.M. R 1:45 P.M. - 2:45 P.M. other times by appointment

## D. Expected Learner Outcomes

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

- 1. discuss and describe the software development process,
- 2. demonstrate the use of flowcharting and pseudocode in the development of programs,
- 3. compare and contrast the control structures used in structured programming,
- 4. create programs to solve problems using the repetition, selection, and sequence structures,

- 5. demonstrate the use of arrays in a program,
- 6. compare and contrast random and sequential file access,
- 7. write a program that uses sequential file access,
- 8. write a program that uses random file access,
- 9. convert numbers between binary, decimal, octal, and hexadecimal,
- 10. compare and contrast machine language and assembly language,
- 11. compare and contrast procedural and object-oriented languages,
- 12. demonstrate the use of Boolean logic in a program,
- 13. demonstrate the use of methods/functions/procedures in a program,
- 14. define some basic object-oriented programming terminology, and
- 15. demonstrate the use of object-oriented programming techniques.

## E. Required Text and Materials

- 1. Gaddis, T. (2016). Starting Out with Programming Logic & Design, 4th edition. Boston, Massachusetts: Addison-Wesley. [ISBN-10: 0133985075, ISBN-13: 978-0133985078]
- 2. Internet access
- 3. Software (such as Java) available free of charge over the Internet

## F. Breakdown of Course Requirements

10 programs @ 40 points each	400 points
1 midterm exam @ 100 points	100 points
1 final exam @ 100 points	100 points
Total	600 points

#### G. Final Grade Determination

A = 90 - 100%	540 points or more
B = 80 - 89.9%	480 - 539 points
C = 70 - 79.9%	420 - 479 points
D = 60 - 69.9%	360 - 419 points
F = below 60%	less than 360 points

Grade reports will not be mailed out. Please check KishSOS,

My Student Info, under Academic Profile, Grades, for grade reports.

## H. Course Procedures

- 1. Students are expected to attend class sessions on time and prepared (Note: CIS 123 class sessions are optional attendance). Students should bring whatever they need to take notes to every class.
- 2. Students are expected to spend time outside of class completing assignments.
- 3. Food and beverages are not permitted in the classrooms or labs. See a more detailed policy at <a href="http://kermit.kishwaukeecollege.edu/~dklick/foodDrinkPolicy.html">http://kermit.kishwaukeecollege.edu/~dklick/foodDrinkPolicy.html</a>
- 4. A familiarity with computers and the Windows operating system is expected.
- 5. Depending on the assignment, both digital and hardcopy versions of assignments may be required for submission. The procedure for submitting digital copies of assignments will be explained in class. Make sure you always keep a copy of all of your assignments. The instructor is NOT responsible for network failures, server failures, or student mistakes.
- 6. The instructor answers many questions via email. Due to the high volume of requests, submissions, and questions received via email, the instructor must prioritize responses. Most questions will be answered (or at least acknowledged) within 48 hours. If you do not get a

response when you expect one, please keep in mind that your email may have failed to reach the instructor, or may have automatically been rejected by an email client or server. Please try to contact the instructor again and possibly use the phone or an in-person visit if email is failing.

#### I. Make-up Policy

- 1. Assignments are to be turned in on time. Assignments which are not turned in on time will not be accepted unless individual arrangements are made in advance with the instructor. In unusual cases where late assignments are accepted, the cost of being late is ten percent of the total possible points for every portion of a day late, up to a maximum of three days late. For example, an assignment received twenty-five hours past its due date will lose twenty percent of its total possible point value (because it is two days late). Assignments which are received more than three days (seventy-two hours) late will not be accepted and are not worth any points. Exceptions may be made to this rule if the student contacts the instructor before the due date and makes special arrangements in advance with the instructor. All late acceptance decisions of this nature are left solely to the discretion of the instructor. This rule does not apply once answers to an assignment have been distributed or posted. Assignments submitted after answers have been released are worth zero points even if the answers are posted one minute past the due date.
- 2. Answers to assignments may be posted online, handed out in class, or sent via email by the instructor. Once an answer to an assignment has been released, no further submissions for the assignment will be allowed. This rule supersedes all other rules about when late assignments may be accepted. In general, the instructor will try to wait at least forty-eight hours before posting or distributing solutions, but there is no guarantee, so get your assignments in on time.
- 3. Tests are to be taken at the day and time scheduled. Failure to take a test at the scheduled time may result in a grade of 0 for that test. In the case of an excusable absence or a genuine emergency, the instructor must be contacted as soon as possible, preferably before the scheduled test, to reschedule the makeup of that test in the Learning Skills Center on the day the student returns to campus.

#### J. Attendance Policy

Class attendance is strongly encouraged. You are responsible for whatever was covered in class, whether you are there or not. If you must miss a class, it is your responsibility to contact the instructor and make arrangements for notes, handouts, or announcements that were missed. Although attendance is not counted toward the final grade, there may be coursework which is done during class time which may count toward the final grade and may not be able to be taken outside of class time.

# Tentative Weekly Schedule

Please note that this schedule and the topics covered are likely to change. Changes will be announced in class. If you are not able to attend class, it is your responsibility to find out what was covered. A more detailed schedule is provided on the course website. Assignment descriptions and due dates will also be posted on the course web site.

Week	Date	Topics	Reading
1	8/30	syllabus; fundamental concepts	Chapter 1
	9/1	obtaining and running Java, algorithms, programming process, flowcharting, pseudocode, first program	Chapter 1

2	9/6	number systems	Chapter 1, Appendix D
	9/8	number systems	Chapter 1, Appendix D
3	9/13	variables, comments, calculations, operators, input, output	Chapter 2
	9/15	variables, comments, calculations, operators, input, output	Chapter 2
4	9/20	hierarchy charts, methods, variable scope	Chapter 3
	9/22	methods, variable scope	Chapter 3
5	9/27	selection, Boolean values, logical operators, relational operators, if, if/else	Chapter 4
	9/29	selection, if, if/else, nested selection, switch, comparing strings	Chapter 4
6	10/4	repetition, increment, decrement, while, do/while	Chapter 5
	10/6	repetition, while, do/while, for loop	Chapter 5
7	10/11	functions/methods	Chapter 6
	10/13	functions/methods	Chapter 6
8	10/18	input validation	Chapter 7
	10/20	arrays	Chapter 8
9	10/25	Midterm Exam	
	10/27	arrays	Chapter 8
10	11/1	searching and sorting	Chapter 9
	11/3	searching and sorting	Chapter 9
11	11/8	sequential file processing, control break processing	Chapter 10
	11/10	sequential file processing, control break processing	Chapter 10
12	11/15	random access file processing	Chapter 10
	11/17	random access file processing	Chapter 10
13	11/22	menus and recursion	Chapters 11, 13
	11/24	Thanksgiving - school closed	
14	11/29	menus	Chapter 11
	12/1	recursion	Chapter 13
15	12/6	object-oriented programming	Chapter 14
	12/8	object-oriented programming	Chapter 14
16	12/13	GUI, event-driven programming	Chapter 15

	12/15	GUI, event-driven programming	Chapter 15	
17	12/20	Final exam: 10:00 A.M 11:50 A.M., Rm. A-1374		

## Kishwaukee College Policies and Resources

A. Academic Dishonesty

B. Assistive Resources Center/Disability Services

C. Attendance Verification Roster

D. Class Cancellations

E. Class Withdrawal

F. Community Resources

G. Copyright

H. Emergency Procedures/Safety

I. Graduation Requirements for

Transfer Degree Students

J. Incomplete Grade

K. Learning Skills Center

L. Recording of Classes/Presentations

M. Religious Observances

N. Student E-mail

O. Technical Support

Please see the Kishwaukee College Catalog for other policies and resources

#### A. Academic Dishonesty

In order to evaluate student work, faculty must be able to trust that the work is original with a student and not the work of someone else. Cheating, falsifying information, forgery, plagiarism, and other dishonest actions will not be tolerated. Detailed information can be found by clicking on this link: <a href="https://www.kishwaukeecollege.edu/student-life-essential-student-information/student-code-conduct">www.kishwaukeecollege.edu/student-life-essential-student-information/student-code-conduct</a>

## B. Assistive Resources Center/Disability Services

Any student with a documented disability or special learning need and wanting to request accommodations, should contact the Assistive Resources Center in A1317 or at (815) 825-2086 ext. 4290, (815) 825-9106 (TTY). More information can be found on the MyKC Portal: <a href="https://mykc.kishwaukeecollege.edu/collegeareas/vpss/disabilityservices/Pages/default.aspx">https://mykc.kishwaukeecollege.edu/collegeareas/vpss/disabilityservices/Pages/default.aspx</a>

#### C. Attendance Verification Roster

Students who do not attend their class during the refund period will be dropped from the class roster and will be charged for the class. More information can be found on the MyKC Portal: <a href="https://mykc.kishwaukeecollege.edu/collegeareas/vpfa/bo/Pages/default.aspx">https://mykc.kishwaukeecollege.edu/collegeareas/vpfa/bo/Pages/default.aspx</a>

#### D. Class Cancellations

Class cancellations due to inclement weather will be posted on the College Website: <a href="https://www.kishwaukeecollege.edu">www.kishwaukeecollege.edu</a> or announced by the local radio stations. You may sign up for text alerts at myKC/Student Resources/Text Alert. Students may also call the College at (815) 825-2086. Class cancellations due to instructor absence will be posted on the classroom door. Room changes will be announced in advance whenever possible and posted on the classroom door.

#### E. Class Withdrawal

A "W" cannot be given as a final grade. The student is responsible for officially withdrawing from the class according to procedures described in the college catalog. Refer to page 166. Kishwaukee College reserves the right to administratively withdraw students from the Attendance Verification Roster or the Midterm Roster those students who are not actively pursuing course objectives or who are in violation of standards of behavior as outlined in the Student Code of Conduct and Discipline. For a copy of the student conduct policy, contact the Vice President of Student Services Office or refer to the Kishwaukee

## F. Community Resources

There are numerous community resources that are available to assist students in addressing a variety of personal needs. Resource contact information can be found on MyKC: <a href="https://mykc.kishwaukeecollege.edu/collegeareas/vpss/counseling/Pages/Documents.aspx">https://mykc.kishwaukeecollege.edu/collegeareas/vpss/counseling/Pages/Documents.aspx</a>

## G. Copyright

As a Kishwaukee College Student, you may have copyrighted materials or software made available to you by the college for course use. Please understand that copyright law may prohibit copying or further distribution of these materials. Full information can be found here: <a href="https://www.kishwaukeecollege.edu/student-life-essential-student-information-students-right-know/copyright-law-notification">www.kishwaukeecollege.edu/student-life-essential-student-information-students-right-know/copyright-law-notification</a>

## H. Emergency Procedures/Safety

Yellow and red Emergency Information flipcharts are located in each classroom. These are quick reference sheets with telephone numbers to reach emergency assistance and a brief description of the correct actions to take in the event of a tornado, fire or other emergency on campus. More information can be found in the college catalog on page 196.

## I. Graduation Requirements for Transfer Degree Students

Guidelines and specific requirements can be found here: <a href="www.kishwaukeecollege.edu/academics-resources/graduation-requirements">www.kishwaukeecollege.edu/academics-resources/graduation-requirements</a>

## J. Incomplete Grade

All course requirements must be completed by the end date for the course. In the event that extremely difficult circumstances merit granting a student more time to finish course requirements, an "Incomplete" (I) grade may be given. More information can be found in the college catalog on page 170.

## K. Learning Skills Center (A1300)

Tutoring, The Writing Center, make-up tests, online tests, and placement tests are available through the Learning Skills Center. For more information, go to <a href="https://mykc.kishwaukeecollege.edu/collegeareas/vpi/lsc/Pages/default.aspx">https://mykc.kishwaukeecollege.edu/collegeareas/vpi/lsc/Pages/default.aspx</a>

## L. Recordings of Classes/Presentations

Kishwaukee College prohibits students from electronically recording class lectures and presentations (either by audio, video, picture, or otherwise) unless certain qualifying conditions are met.

- The student requires the recording of lectures/presentations as part of his/her accommodations
  related to a disability that has been adequately documented with the Coordinator of the Assistive
  Resources Center.
- 2. The instructor has given advance written permission to the student that stipulates what may be recorded and by which device(s) the lectures/presentations may be recorded.

In either of the above cases, the following restrictions shall apply:

- 1. Recordings are solely for the use of the student designated either in the disability accommodations or the instructor's written permission to record.
- 2. Recordings must not be shared or reproduced for any reason.
- 3. Recordings must not be posted on any public or private website or social media service.
- 4. Recordings must be destroyed by the student at the end of the semester in which the recording was made.

A student found to have committed a violation of this procedure shall be subject to one or more sanctions described in the Code of Student Conduct and Discipline. Students seeking to obtain permission to record a class must inquire with the instructor in question and, if the instructor agrees to allow recording, the student and instructor must complete a Permission to Record a Class/Lecture Presentation form.

## M. Religious Observances

Students faced with schedule conflicts related to a religious observance should make prior arrangements with the instructor a minimum of seven (7) school days in advance of the examination or other activity involved.

#### N. Student E-Mail

Your Kishwaukee College e-mail account will be the official way to receive notices from the College. If you choose to forward your e-mail to another account, please be advised that all communication from and within the college will use your Kishwaukee student e-mail. When communicating with instructors or employees of the college, you are required to use your Kishwaukee e-mail address.

## O. Technical Support

If you require technical support, please contact the Help Desk:

- 1. helpdesk@kishwaukeecollege.edu
- 2. (815) 825 2086, ext. 4357 (HELP)
- 3. Visit the Helpdesk's office located in Media Services A1252
- 4. http://helpdesk.kishwaukeecollege.edu