Syllabus



Course Description

This class is a survey of computers and their applications in business, government, and society in general. Topics include computer hardware, software, programming, networking, information systems, databases, and careers related to IT (information technology). This class is for students interested in computer technology. An introduction to computer programming with Alice, and using Microsoft Excel and Microsoft Access is also included.

• **Semester**: Fall 2021

• Class No: 73621

• **Units**: 4.0 (6 hours lecture/6 hours lab per week)

Meets: online at <u>sdccd.instructure.com</u>
for 8 weeks from August 23 to October 16, 2021

• **Instructor**: Prof. Richard Pelletier - Computer & Information Science

• Office: BT-210 D

• **Telephone**: (619) 388-3113 (office/voice), (619) 354-5648 (cell phone/voice/text)

Email: rpelleti@sdccd.edu



Prerequisites & Advisories

This course is not an introduction to computers. This is an introduction to computer information systems and computer programming. No computer programming experience is needed, but you are expected to know how to use a computer and the internet.

Students must have completed English 047a or 048 and English 049 or higher with a grade of C or better or have an Assessment Skill Level W5/R5.

If you are new to computer programming, do not take more than one computer programming class at the same time. The similarities and differences will make it difficult for most students. It is like trying to learn multiple languages at the same time.

Student Learning Outcomes

- Describe the functions of computers, hardware, software, and usage of the internet.
- Examine the purpose and functions of spreadsheet and database software to independently analyze and develop projects.
- Create computer programs to experience how programs are written for business use.

Course Content

Information Systems

- 1. Using Technology
- 2. Understanding Computers
- 3. Using the Internet and Web Resources
- 4. Application Software
- 5. System Software
- 6. Understanding Computer Hardware
- 7. Networking Computers
- 8. Digital Devices and Media
- 9. Securing Your Digital Life
- 10. Computer Programming
- 11. Databases and Information Systems
- 12. Networking and Security in Business
- 13. How the Internet Works

Microsoft Excel

- 1. Creating and Formatting a Worksheet
- 2. Performing Quantitative Analysis with Formulas and Functions
- 3. Depicting Data Visually with Charts
- 4. Managing Large Volumes of Data with Datasets and Tables
- 5. Summarizing and Analyzing Data with Subtotals, Pivot Tables, and Pivot Charts
- 6. What-If Analysis using Decision-Making Tools
- 7. Specialized Functions: Date, Logical, Lookup, Database, and Financial Functions

Microsoft Access

- 1. Understand database fundamentals and know when to use Microsoft Excel or Access.
- 2. Create, use, edit, and update a database.
- 3. Sort data in a database.
- 4. Create, use, edit, and update a guery to a database.
- 5. Create expressions for calculated fields in a database or query.





Alice Programming

- 1. Introduction to Alice and Objects
- 2. Programming in Alice
- 3. Variables, Functions, Math, and Strings
- 4. Decision Structures
- 5. Repetition Structures
- 6. Methods, Functions, and More About Variables
- 7. Events



Required Course Materials

For this class you will need the following:

- Textbook
- Software
 - Microsoft 365 with MS Excel and MS Access
 - o Alice 2
- Internet

Textbook

For this class we will be using three textbooks:

- **Technology in Action**, 16th Edition
- Exploring Office 365, 2019 Edition
- Getting Started with Alice



All three textbooks are available in one package as eTexts in **MyITLab** (aka *MyLab IT*). We will be using MyITLab for our textbooks, exercises, assignments, and quizzes. On the first day of class, I will show you how you can get MyITLab free for 14 days. After that, if you want to continue in this class, you will have to buy an access code from the City College Bookstore (www.bookstore.sdccd.edu/city) or through the publisher, Pearson.

If you get your access code from the college bookstore, note that they cannot send it by email and you will have to wait for a physical card to come in the mail before you can use it.

It is not possible to buy a used version of MyITLab, nor is is possible to share one copy--you must have your own access to MyITLab.

Software

You will need a **Windows PC** with **Microsoft 365** (aka *Microsoft Office*) for this class. We will be using **Microsoft Excel** and **Microsoft Access** from Microsoft 365. I recommend using a computer that runs on *Microsoft Windows 10*, but you will be able to use older Windows versions if it can run Microsoft Office 2019 or higher. If you don't already have

Microsoft 365 or Microsoft Office, you can purchase a version with a student discount through <u>CollegeBuys.orq</u>.

If you do not have a Windows PC, you will have difficulty completing the final three assignments in Microsoft Access. Microsoft Access only works on Windows PCs.

We will be using **Alice 2** to do programming assignments. Alice is available free to students through <u>Alice.org</u>.

Internet

This should go without saying, but when you enroll in an online class, you will need reliable access to the internet. Slow, unreliable internet will affect your grade because most of the assignments are online. If your internet is slow or unreliable, you may have to redo your exercise, quiz, or assignment.

Class Format

CISC 181 is a 4 unit course that normally meets 3 hours per week for lecture and 3 hours per week for lab for 16 weeks, but this class is in an 8 week session, so we must cover twice as many hours per week. We will use Canvas to take this class online. You will need access to the internet to use Canvas.

We will be using MyITLab for our class. Our version of MyITLab has three textbooks:

- 1. Information Systems: **Technology in Action**
- 2. Microsoft Office: Exploring Microsoft Office 365
- 3. Computer Programming: **Starting Out with Alice**

Each week we will be reading at least two chapters in each of the textbooks, do a number of exercises, quizzes, and assignments.

Each week I will post the assignments on **Monday** and everything will be due by 11:45 PM on **Saturday**.

I do not assign anything on Sunday, but you may read ahead and prepare for Monday's lesson on that day if you like.

Communications

Each week I will post a new lesson and a message in Canvas Inbox. From time-to-time it may be necessary for me to let you know of changes or updates to the class materials, so check your Canvas Inbox messages every time you log in to Canvas.

Student-Teacher confidentiality is important to me. I will only discuss your grades with you in Canvas Inbox. Because I have no way of identifying you through your email, if you contact me by email, I will ask you to contact me through Canvas Inbox.

Attendance

Attendance will be recorded by completing assignments and tests. According to district policy, you must not be absent for more than 12 percent of the total class hours which comes to around one week. If you stop doing assignments or tests for 2 weeks or more, I will have to drop you from class for non-attendance.

For federal financial aid, including VA benefits, it is important that you continue to make academic progress. To show that you are making academic progress, you must do the assignments and tests. If you do not make academic progress for 22 days, you will be dropped from the class.

If you plan to drop this class, do so officially. It is your responsibility to drop yourself from classes before the deadlines. If you stop attending class without officially dropping yourself from the class, you may find an F grade on your student record which may affect your financial aid, graduation, or transfer plans.

Grading

Everything in this class will fall into one of the following categories:

- **Exercises** Exercises, Check Your Understanding, and Simulations.
- **Assignments** *Grader Projects* and *Alice Programming*
- **Tests** End of Chapter Quizzes

Each item will have a score based on the earned points divided by the total possible points x 100 then weighted by the following percentages:

- **Exercises** 20 percent
- Assignments 40 percent
- **Tests** 40 Percent

The final score will be a number on a 100 point scale and translated to a letter grade as follows:

100 Point Grading Scale

Score	Letter Grade	
100 to 90	A	
89 to 80	B	
79 to 70	C	
69 to 60	D	
59 to 0	F	

Canvas only records the scores for each item that you complete. It does not calculate your grade in this class—I have to do that at the end of the semester.

If you have any questions about your scores or grade, contact me through Canvas Inbox.

Important Notes

Responsibility to Add, Drop, or Withdraw

It is your responsibility to add, drop, or withdraw from classes before the deadlines stated in the class schedule. Petitions to add, drop, or withdraw after the deadline will not be approved without proof of circumstances beyond the student's control which made the student unable to meet the deadline. Lack of money to pay fees is not considered an extenuating circumstance. Students anticipating difficulty in paying fees before the add deadline should check with the Financial Aid Office about sources of funds or other alternatives for which they may be eligible.

Classroom Behavior & Student Code of Conduct

Students are expected to respect and obey standards of student conduct while in class or on the campus. The Student Code of Conduct, Disciplinary Procedure, and Student Due Process (policy 3100 and procedure 3100.2) can be found in the college catalog, student handbook, and the Office of the Dean of Student Affairs. Charges of misconduct and disciplinary sanctions may be imposed upon students who violate these standards of conduct or provisions of college regulations.

Academic Integrity

This class will be conducted in accordance with the college Student Code of Conduct and basic standards of academic honesty. Cheating, plagiarism, or other forms of academic dishonesty are not acceptable and will not be tolerated. Violations of standards of academic honesty will be reported to the college disciplinary office for appropriate action.

Accommodation of Disability

Students with disabilities who may need academic accommodations should discuss options with me sometime during the first two weeks of class.

I have made every effort to make this course accessible to all students, including students with disabilities. If you encounter a problem accessing anything in this course, please

contact me immediately. Students with disabilities should email me and contact the college's Disabled Students Programs and Services (DSPS) office.

Changes to the Syllabus

From time to time this syllabus may need to be changed. I will notify the class of changes when they occur and update the online version of this syllabus. The revision date can be found on the last page of this syllabus.

Calendar

The dates may change. I will notify the class of changes when they occur.

Week	Date	Info Systems	MS Office	Alice Programming
1	Aug 23	Introduction to the Class		
2	Aug 30	Ch 1, 2	Excel 1, 2	Alice 1
3	Sep 6	Ch 3, 4	Excel 3, 4	Alice 2
4	Sep 13	Ch 5, 6	Excel 5, 6	Alice 3
5	Sep 20	Ch 7, 8	Excel 7	Alice 4
6	Sep 27	Ch 9, 10	Access 1	Alice 5
7	Oct 4	Ch 11, 12	Access 2	Alice 6
8	Oct 11	Ch 13	Access 3	Alice 7

Aug 31 Last day to add/drop this class.

Sep 24 Last day to withdraw from this class.

Oct 16 End of Class

Revised: August 16, 2021