**St. Charles Community College**

**CPT 281 — Advanced Programming in C++**

Fall 2017**—**3 Credit Hours

Tech 214

**Instructor Office Hours**

Ms. Deepika Jagmohan Monday / Wednesday 8:30 a.m. – 11:00 a.m.

Tech 105-C

636-922-8568

[djagmohan@stchas.edu](mailto:djagmohan@stchas.edu)

**Instructional Goals:**

This class will provide an environment where the College’s goals for students in the areas of Critical Thinking, writing across the Curriculum, and Computer Literacy are practiced. These will be utilized in a variety of ways throughout the course.

**Text/Supplies**

* D.S. Malik’s C++ Programming: Program design Including Data Structures, Seventh Edition, Course Technology, Boston MA 2015
* Flash drive or reliable cloud storage access.

**Grading**

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| --- | --- | --- | --- |
| Grading Scale | | Activity Weight | |
| A | 93-100 | Attendance | 10% |
| B | 85-92 | Class Projects | 30% |
| C | 75-84 | Tests | 30% |
| D | 65-74 | Final Exam | 30% |
| F | Below 65% |  |  |

**Course Objectives**

The students will gain knowledge of the following: -

* Classes and data Abstraction, Overloading and Templates
* Pointers, Exception Handling, Explore Recursion
* Linked Lists, Stacks & Queues, Searching and Sorting Algorithms, Binary Trees

**Course Policies**

* **Last day to drop and receive a “W”: Oct 27**
* **Last day to change from credit to audit or audit to credit: September 15**
* All class work, project assignments, homework, written work, and tests must be turned in at the assigned times. **Late work will not be accepted.** All work will be returned to students in a timely manner; the instructor will try to have assignments returned within the week after the assignment deadline.
* **All tests must be taken according to the test schedule provided in this course syllabus.** If an emergency arises and a student is not able to test on one of scheduled days/times, they must meet with the Instructor ASAP. Any student absent on the assigned day of the final exam will be given an F for the course.
* **Absolutely no cell phones should be visible during class time for any reason**. There will be one warning, and then points will be deducted from your semester grade. **There will be no warnings in the case of testing; any phones seen during a test will result in a ZERO on that test.**
* Please refrain from sleeping. In general, maintain respectable classroom decorum.
  + **Show up**
  + **Be prepared**
  + **Be respectful**
  + **Participate**
  + **Submit assignments on time**

Students who engage in disruptive behavior will be asked to leave for the remainder of the class period and will be required to meet with the instructor prior to returning to class. This may include continual misuse of computers (i.e. web surfing, playing games, and email in lieu of working on assignments or participating in demo/lecture).

* Any form of academic dishonesty, plagiarizing, cheating, fabrication, facilitation, or other academic misconduct is prohibited. Please refer to the SCC Student Handbook for definitions and specific examples of academic misconduct. Students found responsible of academic misconduct will receive a zero on the exam or assignment in question and may receive an “F” for the course.
* Beginning fall 2012, the college has instituted a “pay to print” policy in each of the campus labs. You will need your SCC Student ID in order to print and copies are: 10¢ for B/W one-sided, 15¢ for B/W double-sided, and 30¢ for color one-sided copies. **For the purpose of this class, only documents related to THIS course may be printed in the classroom. Failure to comply with this policy will result in loss of printing privileges.**

**Graded Papers and Exams:** Graded papers and exams will be returned to students as soon as is reasonably practical. Normally this will be within one week, but could be longer in unusual circumstances

**Attendance**

* You should attend all class meetings for classes in which you are enrolled. The college has no plan of recognized class ‘cuts’ or absences. You should attend all class meetings in which you are enrolled. Excessive absence may be sufficient cause to fail the course. For distance classes, “attendance” will be defined as active participation in the course as described in the individual course syllabus. The final decision as to what constitutes excessive absence from a class is left to the instructor and will be outlined in the course syllabus. Students should discuss any absences with their instructor.
* Class Absence Policy:  
  The fact that most all of this course is hands-on makes attendance at class even more important.  If absence is unavoidable, the student is expected to have the textbook material read and any homework assignments completed before returning to the next scheduled class.  Failure to do this will cause the inability to keep up with the class material being discussed.
* **DO NOT call or e-mail me to find out what we covered in a class that you missed.    
  This information should be obtained from the course timetable, Canvas, and/or a classmate.**
* **Late work will NOT be accepted.**

**Administrative Withdrawal**: A student may be referred for an administrative withdrawal for excessive absences or lack of work turned in during the class. Students should not assume they will be withdrawn – it remains their responsibility to withdraw from any class they do not plan to attend. For specific details on the policy, refer to the SCC Student Handbook at [**http://www.stchas.edu/academics/student-resources/student-handbook/**](http://www.stchas.edu/academics/student-resources/student-handbook/)

**Campus Computer Labs:** There are open computer labs on campus for your use if you do not have the correct software, are not able or inclined to purchase the software, or have any technical issues with your hardware or Internet connection at home. These are located in the Technology Building (Room 116), the ACE Center (2nd floor of Social Sciences building), and the Library (LRC). For availability of each location, please call or visit the labs in advance; hours vary depending on the semester. If you need to make an appointment with a tutor in the ACE Center, you must call ahead to schedule a day and time for that meeting.

**Campus Closings:** For up-to-date information on closings due to inclement weather or other emergencies, call 636-922-8000, log on to [www.stchas.edu](http://www.stchas.edu), *Twitter,* receive a text (if you signed up),or <http://www.facebook.com/stchas>.

**Students with special needs:** We all have various channels through which we learn best. The College has an Office of Accessibility Services that guides, counsels, and assists students with disabilities. It is located in Room 133 of the Student Center. It is your responsibility to discuss with the instructor during the first week of class anything needed to help you succeed. If you have special needs, please call Paige George (636-922-8247) in the Office of Accessibility Services so that your eligibility for services can be determined.

**Mental Health/Counseling Service for Students:** St. Charles Community College offers the opportunity to address your concerns with a FREE mental health counselor on campus. SCC has a well-trained professional to help with a wide range of concerns common to college students including anxiety, eating concerns, alcohol/drug issues, relationship concerns, academic stress, suicidal thoughts, sexual and LGBT concerns. Our mental health counselor will offer short-term counseling, community support and referrals. Please contact Teresa Drury at 636-922-8536 or [tdrury@stchas.edu](mailto:tdrury@stchas.edu) in the mental health office to set an appointment. The office is located in the Administration Building, room 1242. Sometime a student may require care beyond the scope of our counseling center and in these situations, students will be assisted with establishing care off campus.

**Safety Consideration after Night Classes:** It is highly recommended that students park in the same designated lot, to be agreed upon the first night class, and walk out together as a group when class is over. Although any students who wish to contact campus security to walk them to their car may do so.

As a faculty member, I am deeply invested in the well-being of each student I teach.  I am here to assist you with your work in this course.  If you come to me with other non-course-related concerns, I will do my best to help. It is important for you to know that all faculty members are mandated reporters of any incidents of sexual misconduct.  That means that I cannot keep information about sexual misconduct, stalking, relationship violence, or sexual harassment confidential if you share that information with me.  SCC’s Title IX Coordinator, Sylvia Edgar, can advise you confidentially as can SCC’s Licensed Therapist.  Sylvia can also help you access other resources on campus and in the local community.   You can reach Sylvia at x8654 or [sedgar@stchas.edu](mailto:sedgar@stchas.edu), and her office is in ADM 1242.  SCC’s Licensed Therapist can be reached at x8571.

SCC’s Prohibition of Discrimination, Harassment, Sexual Harassment and Violence Board Policy is available on-line at [www.stchas.edu/titleix](http://www.stchas.edu/titleix); this includes policies, definitions, procedures and resources.

**Tentative Schedule**

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| --- | --- |
| Week (of) | Topic |
| August 21 | * Introduction to Course * August 23 – C++ Review Program |
| August 28 | * Chapter 10 – Classes and Data Abstraction |
| September 4 | * September 4 – Labor Day Holiday * Chapter 10 – Classes and Data Abstraction |
| September 11 | * Chapter 11 – Inheritance and Composition |
| September 18 | * Chapter 12 – Pointers, Classes, Virtual Functions, Abstract Classes and Lists |
| September 25 | * Test1 |
| October 2 | * Chapter 13 – Overloading and Templates |
| October 9 | * October 9-10 – Fall Break * Chapter 13 – Overloading and Templates |
| October 16 | * Chapter 14 – Exception Handling |
| October 23 | * Chapter 17 – Stacks and Queues |
| October 30 | * Chapter 17– Stacks and Queues |
| November 6 | * Test 2 |
| November 13 | * Chapter 16 - Linked Lists |
| November 20 | * Chapter 16 – Linked Lists * November 23 – 27 -Thanksgiving Holidays |
| November 27 | * Chapter 18 – Searching and Sorting Algorithms |
| December 4 | * December 4 – Final Exam Review Day * December 6 – Study Day Off |
| December 11 (Day) | * Final Exam |