Computer Science 445 Sec. 1
TTh 10:00-11:50AM, Room: SH 160

Instructor:	Lindsay Jamieson, SH 152
Contact Information	Phone: x4474, Email: lhjamieson@smcm.edu
Office Hours:	1:20-2:30 MW, 1-2 TTh and by appointment
Online Office Hours:	Most evenings and weekends
OnilneID:	lindsaySMCM
Textbook:	"Introduction to Algorithms" 2nd ed.,

Course Description:
(From the course catalog)
This course studies the design, implementation and analysis of important algorithms. Topics include upper and lower complexity bounds; algorithm analysis techniques; NP-completeness; sorting algorithms; searching algorithms; graph algorithms; divide-and-conquer algorithms; greedy algorithms; dynamic programming; backtracking; probabilistic algorithms; and mathematical algorithms. Not open to students who have received credit for COSC 340. Prerequisite: COSC 201; and MATH 200 or MATH 281.

Objectives:
By the end of this course, students should be able to:

1. Look at an algorithm and analyze the best and worst case scenarios for that algorithm's run time.
2. Describe various types of algorithms and their run times.
3. Describe the complexity of an algorithm.
4. Understand the space/time complexities and how they inter-relate.

Hopefully, your appreciation for algorithms will grow during the semester.

Schedule:
The schedule for this class will be published on Blackboard. At least one project and the midterm exam will occur and be graded before October 15th. Any changes to the schedule will be announced in class and on Blackboard.

Homework
There will be 10 homework assignments worth 10 points each over the course of the semester.

Evaluation:
There will be a midterm exam, a cumulative final exam, and 2 projects in this class:

1. Algorithm Project - 25%
2. Complexity Project - 25%
3. Mid-term Exam - 20%
4. Final Exam - 20%
5. Homework - 10%

Full explanations of the exams and projects will be given as the semester goes along.

Policies:

1. Academic Integrity - Please refer to the Student Handbook Article III Section 1 for definitions of Cheating, Plagiarism, Falsification and Resubmission of work. Violations of these types will be dealt with accordingly.

2. Work "In Groups"- Outside of class and in class, you may discuss concepts together. However, submissions should be in your own words. Projects should be individual unless specifically stated in the project description.

3. Late Submissions - Late work will suffer a 10% penalty for every 24 hours the work is late. This means that if a project is due at 5PM Monday and is handed in anywhere from 5:01PM Monday until 5PM Tuesday, it will have a 10% late penalty.

4. Attendance - Attendance is expected. To emphasize the point, in order to receive an A in the class, you must attend at least 90% of the classes; for a B, you must attend at least 80% of the classes, etc.

5. Cell Phones - Please turn cell phones to silent or off during class. You get one freebie. After that, any interruptions by cell phones may result in you being asked to leave and counted as absent for the class period.

6. Computer Usage - During class time computers may only be used for class related activities. This means, specifically, no email, no chat clients, and no web browsing. Unless the current class activity requires internet usage, no internet activity of any kind is acceptable. Again, you get one freebie. Repeated offenses may result in you being asked to leave and counted as absent for the class period.

7. Tardiness - Repeated and excessive tardiness is rude to me and your classmates. Again, you get one freebie. Repeated offenses may result in you being told that you were never here for that class period. If you have a legitimate commitment elsewhere that may result in your tardiness, let me know ahead of time.

8. Food - Snacks will be provided by the instructor for the final exam. If you have any dietary restrictions please let the instructor know before the exam so she doesn't just bring chocolate and sugar.