

CPSC 4620 – Database Management Systems

Spring 2019

M,T,W,Th,F 11:30 am – 1:00 pm

Room: Daniel 408

Instructor: Kevin Plis

Office Hours:

M,W, F 2:00 - 3:00

Email: kplis@clermson.edu

Office: McAdams 214

Contacting Your Instructor

The best way to contact me is through email. I do my best to respond to emails within 24 hours. I will respond to emails in the order that they come in, so do not expect an immediate response especially during high volume times (i.e. the night before an assignment is due). Canvas offers a messaging system which is not an effective way to reach me. Due to the lack of notifications, it can take days for me to notice a message on Canvas. Email me instead to ensure I see your message.

Office hours are a great time to come get help or ask questions. You do not need to make an appointment to come to office hours, you can just show up. Office hours are first come, first serve. If office hours do not work for you, you can make an appointment to meet with me at another time that works for both of us. Please do not request an appointment unless you cannot attend office hours due to a conflict with your class or work schedule. Due to the number of students I have each semester, I cannot meet with everyone individually. Please do not show up at my office unannounced outside of office hours. I will often be in my office working on something (grading, preparing lecture slides, creating exams and assignments etc.). By showing up unannounced, you put me in an awkward position to either say no to your request for help, or spend time that I had allotted for another task helping you, and throw off my schedule for the day.

I also request that when you come to me for help, you have specific questions prepared. Office hours or meetings with me are not a time for you to work on the assignment in my office. Vague emails about needing help will receive a response asking for specific questions, and given the delays that can occur with emails that exchange can take quite some time, leaving you less time to complete your assignment.

Also, I have a simple request. If you want something to be a priority for me, make sure it is a priority for you as well. If you have issues with attending class regularly, do not expect me to sit down and reteach the material just for you. If you wait until the last minute to start an assignment, do not expect me to be sitting by my computer anxiously awaiting any last second emails with questions. Again, expect a significant delay in response time for emails.

Course Description:

Introduction to database/data communications concepts as related to the design of online information systems. Problems involving structuring, creating, maintaining, and accessing multiple-user databases are presented and solutions developed. Comparison of several commercially available teleprocessing monitor and database management systems is made. This course will focus on the design and use of relational databases and Structured Query Language (SQL).

Learning Outcomes:

1. Students shall understand conceptual modeling concepts and be able to use ER Model to design databases.
2. Students shall be familiar with relational data models and be able to design relational database schemas from ER diagrams.
3. Students shall be able to use an industry standard query language (SQL) to query the relational databases.
4. Students shall gain experience in designing and implementing database systems.
5. Students will be able to create and work with applications that store and retrieve data from relational databases.
6. Students will understand basic security issues with relational databases, and be familiar with common solutions to those security issues.
7. Students will be able to differentiate between relational databases, object oriented databases, XML databases, and NOSQL databases.

Textbook:

Fundamentals of Database Systems, Seventh Edition, Ramez Elmasri, Shamkant B. Navathe, Addison Wesley, 2010, ISBN: 0133970779

This textbook is not required, but I will be basing this course off of this textbook. I will not give any assignments that require the textbook to complete. It is a very good textbook for databases, and contains material well beyond the scope of this course. We will cover roughly 10 of the 30 chapters in this textbook, so this textbook could easily be used for multiple database courses. If you are interested in working primarily with databases, working for a company that develops DBMS's or specializing as a Database administrator or architect, then I highly recommend this book. The 6th edition is also good, but does not contain the last few chapters which cover the new types of databases that have been developed to handle the needs of "big data" systems such as datamining applications and social networks.

iClicker:

We will be using iClicker to track attendance and to take in class quizzes. You are required to have the iClicker app installed on a smart phone, tablet or laptop that you will bring with you to class. iClicker has transitioned to a software only system that does not use the plastic clickers. DO NOT BUY A PLASTIC CLICKER. Not only are they an unnecessary waste of money, but they will not work with the software I use. You will be able to register a free account, but will need to purchase access after the two week trial is over. The subscription is relatively cheap (less than \$20).

Attendance:

Attendance is not recorded for a grade; however, there may be assignments or unannounced quizzes that must be completed in class. If you are not in class, you will not be able to complete the assignment. So while there is no place in the gradebook marked "Attendance" missing class will have a negative impact on your final grade. Attendance will still be taken in each class through iClicker. Again, this attendance will not factor into your grade, it is just for my records. In the event that a student fails a course I need to report details regarding that student's attendance to the school. Also there is a push to crack down on student loan fraud, so I am required to take attendance. You do not need to notify me about absences unless there is an exam or quiz on that date, or if you want to ask about any assignments or what topics you will miss.

If you will be missing class for any reason and you let me know before hand, you may be able to make up assignments that you would miss in class (instructor's discretion). The more notice I have about a missed class the easier it will be to make arrangements for in class assignments. Missed quizzes and exams can only be made up with significant prior notice, at least 24 hours in advance, or in the case of extreme circumstances (car wreck, hospitalization, etc) which will require some form of evidence. Unannounced quizzes proctored through iClicker cannot be made up in the event that you miss class (even with prior notice); however, there is a 10% curve added to the unannounced quiz grade. So you can safely miss 10% of the unannounced quizzes without negatively affecting your grade.

Any exam that was scheduled at the time of a class cancellation due to inclement weather will be given at the next class meeting unless contacted by the instructor. Any assignments due at the time of a class cancellation due to inclement weather will be due at the next class meeting unless contacted by the instructor. Any assignments that are turned in remotely (email, handin, canvas, etc.) will still be due at their normal due date even in the case of inclement weather. Any extension or postponement of assignments or exams must be granted by the instructor via email or Canvas within 24 hours of the weather related cancellation.

Students are expected to wait 10 minutes after the scheduled start of class for the instructor to arrive. After 10 minutes, if the instructor has not arrived, assume the class was cancelled. I will do everything I can to make sure you are aware of any class cancellations. This policy is for extreme circumstances, such as a car wreck or hospitalization on my end.

Grading:

You are responsible for keeping track of your own grades. I will post grades for individual assignments on Canvas, but Canvas does not accurately keep track of the way that grades are weighted for the final grade. You will need to do so yourself in order to have an accurate picture of your grade in the class. If you are not in class the day that a grade is handed out, you can come to my office (during office hours) to pick up the graded assignment. Any emails regarding your grade must be sent from your Clemson.edu email address. I cannot discuss grades with an unverified email without risk of violating FERPA laws.

Homework Assignments:

There will be four homework assignments that will be completed as individuals. These assignments will be separate from the project, although you will have to work on individual homework and the project assignment in parallel. These assignments will not build off of previous steps, and are meant to be easy assignments to help develop and practice the skills you will need for the project. They are something you could complete quickly after class and submit the next day, although I try to give you a few days to work on them. Late submissions will not be accepted. You are not allowed to work with a partner on these assignments.

The dates for these assignment are tentative and may change

Homework 1: Entity Relationship diagrams – Due Thursday, May 23rd at 11:59 pm

Homework 2: Convert ER diagrams to Schemas – Due Thursday, May 30th at 11:59 pm

Homework 3: Basic SQL – Due Thursday, June 6th at 11:59 pm

Homework 4: Advanced SQL – Due Monday, June 10th at 11:59 pm

These individual assignments will be worth 15% of your final grade.

Project:

There will be a large project broken into four smaller assignments over the course of the semester. Every phase of the project will build off of a previous phase, so it will be important to submit high quality work. You may (and are encouraged to) work with a partner for this project. You may not change partners for different stages, however you can decide to work alone after working with a partner if you have issues working together. This project will require a significant amount of work, so I encourage you to work with a partner. Make sure to work *with* your partner. Communication and coordination is important, so just relying on divide and conquer will likely produce low quality work. This project in total will be worth 30% of the final grade. No late assignments will be accepted.

The dates for these assignments are tentative and may change

Project 1: Entity Relationship Diagram – Due Tuesday, May 28th at 11:00 am

Project 2: Convert ER diagram to Schema – Due Monday, June 3rd at 11:59 pm

Project 3: Build Database in MySQL – Due Tuesday, June 11th at 11:00 am

Project 5: Connect Java Application to MySQL DB – Due Tuesday, June 18th at 11:59 pm

Pop Quizzes:

Unannounced quizzes will be very short (a few questions) and will be much easier questions, and they will be proctored using iClicker. They will be used as recall exercises and as a way for everyone to gauge their progress in learning the material. They will be very common, usually with several questions during every lecture. Unannounced quizzes cannot be made up in the event that you miss class (even with prior notice); however, a 10% curve is added to the unannounced quiz grades. Half of the grade on a pop quiz will be based on participation, the other half will be based on correctness.

Pop Quizzes will be worth 5% of your final grade.

Mid-term Exams: Notice of the midterms will be given well in advance to allow plenty of time for preparation.

The following dates are tentative and subject to change

Midterm 1: Wednesday, May 29th

Midterm 2: Wednesday, June 12th

There will be two mid-term exams worth 15% of the final grade each, for a total of 30% of the final grade.

Final Exam:

We will have a cumulative final exam in this course. If you have three or more final exams on the same day, let me know and we may be able to move your exam to a different time.

You will be able to exempt the final if earning your lowest midterm exam grade on your final would result in an A in the course. Example: On midterm 1 you earn an 92%, and on midterm 2 you earn an 85%. If earning an 85% (the lowest midterm exam score) on the final would result in your earning an A on the course, you will not have to take the final exam and will earn an A in the course. Note that the last homework assignment is due a few days before the final, so I may not know if you are exempt until the day before the final.

Final Exam Time: Thursday, June 20th at 11:30 am

I cannot change the time of the final exam. The schedule is set by the school. You can view the Clemson University Final Exam Schedule online.

The final exam will be worth 20% of your final grade.

Extra Credit: There will be no extra credit for this course.

Grading Scale:

Percent Grade	Letter Grade
$\geq 90\%$	A
$<90\%$ AND $\geq 80\%$	B
$<80\%$ AND $\geq 70\%$	C
$<70\%$ AND $\geq 60\%$	D
$<60\%$	F

This grading scale will not change, however a curve may be applied at the instructor's discretion at the end of the semester, or to individual exams, quizzes or assignments. Curves can only raise your grade, they can never lower it. Curves will never result in a student earning more than 100% in the class or an assignment. Curves are meant to correct for instructor error. For example, If I give an exam that students are unable to finish in the allotted time, then I gave an unfair exam and a curve will be applied to correct that error.

Late Policy:

Homework assignments will normally have an 11:59 pm deadline, but not always. Be aware of the deadline for each assignment. That deadline is a firm deadline, and no late submissions will be accepted. Even a minute late counts as late. We all know that things can go wrong while trying to submit an assignment. Your laptop battery could die, the wi-fi could stop working, Canvas could crash or be slow, etc. If I don't have proof that the assignment was completed before the deadline, then it is late. Give yourself the time to finish the assignment earlier in the day so when something goes wrong you have time to fix it or find another way to submit the assignment before the deadline. Some assignments may not allow late submissions.

You are responsible for submitting the correct and uncorrupted files for each assignment. Handin and Canvas both allow you to view your files after you have submitted them, so make sure you have submitted the correct files and that they were not somehow corrupted. You will not be allowed to re-submit the correct file days later after you have received a grade and realized you have submitted the wrong file, unless I can verify that the assignment was completed on time.

In order to verify that the assignment was completed before the due date you need to be able to show me the unedited files on a UNIVERSITY controlled computer. Timestamps from your personal computer will not be accepted as proof of the completion by the due date since you would be able to edit those time stamps.

Examination Rules

During any exam or quiz the following rules will be used. Violation of these rules or refusal to follow any of these rules will result in an academic integrity charge.

1. No notes, cell phones, laptops, or extra materials are allowed during the exam. All extra materials should be put away and out of sight during the exam. Anything that makes noise should be silenced.
2. Hats with bills need to be removed or turned so the bill is not covering your eyes.
3. All watches must be removed and put away. I don't have time to check for smart watches so all watched must be removed. I will project a timer that will count down to the end of the exam, so you will know how much time you have left.
4. Headphones must be put away, not just draped around your neck.
5. No talking or other forms of communication are allowed during the exam room unless you are asking the instructor or the TA a question. Even after you have turned in your exam, you are not permitted to talk with a friend on the way out of the class room.
6. No food is allowed during the exam. Beverages are allowed.
7. During any exam you will not be permitted to leave the room and then return and continue the exam. Leaving the exam room will constitute turning in your exam, and I will collect your exam at that time and grade it based on what you were able to complete before leaving the room. If you are ill and think that you may need to leave suddenly, please contact me before the start of the exam so we can reschedule your exam.

8. I will not accept or grade an exam that has left the classroom. There should be nothing else on your desk to “accidentally” turn in instead of your exam, and it is not unreasonable to expect you to turn in your exam before you leave the classroom.
9. Students will be required to spread out as much as the room will allow. Please do this on your own so I do not have to spend time telling students to move to another seat.
10. Exams will not be distributed until everyone is complying with the rules of the exam. Trying to study up until the last second and then taking time getting things put away will result in losing time for the exam. Please be prepared to start the exam when the class begins.
11. Exams must be turned in by the end of the class period. I will not grant a few more minutes. The time in between class is meant to provide time for everyone to pack up, leave, and for the next class to get into the classroom and settled before the start of their class. If I give extra time after class ends, it delays the process and could result in issues for the class that uses the room after us. Even if there is no class in the room after us, I must adhere to this rule since another section may not have had that opportunity for extra time. I will not purposefully make my exams be constrained by time, and if you are prepared for the exam you should not have a problem completing it in the time given.

Academic Integrity:

Unless specifically assigned as a group assignment, all work for this course must be completed on your own. It is acceptable to discuss topics you do not understand with other students in the class, but do not discuss the specifics of any assignment or share assignments. Any specific questions regarding the assignment should be directed to the instructor.

If an assignment is assigned as a group assignment it is only acceptable to work on the assignment with members of your own group. Any collaboration between groups would count as an academic integrity infraction.

As members of the Clemson University community, we have inherited Thomas Green Clemson’s vision of this institution as a “high seminary of learning.” Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form.

University policy requires that I report any possible Academic Integrity infractions to the university. I am not allowed to handle any issues on my own. Once the issue has been reported, the university handles the whole process from there. This protects the students from any unfair treatment at the hands of a biased instructor, and protects the instructor and the university from claims of unfair treatment. While it is an effective process, it is an unpleasant process that takes several weeks to resolve. The University also sets guidelines for punishment. For a first offense, the punishment ranges from a 0 on the assignment, to failing the course, depending on the severity of the infraction. For a second infraction, the student automatically fails the course and is recommended for expulsion. From a risk vs. reward perspective, it is absolutely not worth getting caught. It can be tempting to think that since students

were all given the same assignment, that we will see very similar submissions. The truth is that there is far more variation than anyone expects, and similar submissions stand out.

Accessibility:

Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing studentaccess@lists.clemson.edu, or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen if at all possible, but there could be a significant wait due to scheduled appointments. Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student's responsibility to follow this process each semester. You can access further information here: <http://www.clemson.edu/campus-life/campus-services/sds/>.

If you need any special accommodations due to accessibility issues, please visit Student Accessibility Services as soon as possible. You do not need to inform me of the reason that you need accommodations, you will work that out with someone at Student Accessibility Services, and they will instruct you and I on how we can properly accommodate you. They know how to arrange all of that far better than I do, so talk to them first. If you need to use the test proctoring center for exams, you need to send the request to the test proctoring center at least one week in advance.

Equal Opportunity:

Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This policy is located at <http://www.clemson.edu/campuslife/campus-services/access/title-ix/>. Ms. Alesia Smith is the Clemson University Title IX Coordinator, and the Executive Director of Equity Compliance. Her office is located at 110 Holtzendorff Hall, 864.656.3181 (voice) or 864.656.0899 (TDD).

Syllabus Changes:

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary. Deviations will be announced verbally in class and posted via announcement on Canvas.

Calendar:

This calendar is an outline of my plan for the semester. It will most likely change, but it gives a good outline of our progress.

Mon 5/13	Tue 5/14	Wed 5/15	Thur 5/16	Fri 5/17
	Syllabus	Ch1, Ch 2 - Intro to DBs	CH 3 - Entities	Ch3 - Relationships
Mon 5/20	Tue 5/21	Wed 5/22	Thur 5/23	Fri 5/24
Ch 3 - University Prompt	CH 4 - Give HW 1	CH 4 Prompt - Give P1	CH 5 - HW 1 Due	CH 9 - Give HW 2
Mon 5/27	Tue 5/28	Wed 5/29	Thur 5/30	Fri 5/31
No class	Practice CH 9 - P1 Due (11:00 AM)	Midterm	Debrief - Give P2, HW 2	CH 6 - SQL
Mon 6/3	Tue 6/4	Wed 6/5	Thur 6/6	Fri 6/7
CH 6 - P2 Due	CH 6 - Give HW 3	Ch 7 Advanced SQL- Give P3	CH 7 HW 3 Due	CH 7 Give HW 4
Mon 6/10	Tue 6/11	Wed 6/12	Thur 6/13	Fri 6/14
CH 10 - HW 4 due	Ch 10 P3 due (11:00 AM) give P4	Midterm 2	Midterm debrief	Ch 30 - Security CH 12 - OO databases
Mon 6/17	Tue 6/18	Wed 6/19	Thur 6/20	Fri 6/21
CH 13 XML, CH 24 NOSQL	Project: P4 Due, Final Review	No class	Exam at 11:30	No class

Student Rights and Responsibilities:

1. Students have a right to receive feedback on their work in a timely manner. I will get grades posted as quickly as I can. Do understand that there are a lot of students, and these assignments can take time to grade. It may take 2 weeks to grade a large assignment. A TA will have about 50 students as their responsibility, and only about 10 hours a week to dedicate to grading. Since students have a right to receive feedback in a timely manner, they also have the responsibility to submit work on time, and ensure they submit the correct files.
2. Students have a right to have their grade reflect their mastery of the course material. I will design assignments and exams so your grade accurately reflects what you have learned during the semester. However, this does mean that in order to get an A, you need to show a high level of mastery on all relevant topics. This right comes with a corresponding responsibility. In order for the grades to accurately reflect what the students have learned, students need to put forth their full effort into the assignments and exams. If a student does not attempt a problem, then they have not demonstrated any mastery of that topic.

3. Students have a right to a positive learning environment. Students should be able to learn without distraction, and should be free to ask questions. I will work to ensure that the material is presented in engaging ways, that materials are available for students to review, and that I am available for questions. Students are responsible for creating this positive learning environment as well. Students are responsible for reviewing materials and being prepared for class. Students are responsible for maintaining a distraction free lecture hall. Please do not have side conversations in class, or have something on your laptop screen that is distracting to the people sitting behind you (youtube videos, playing games, browsing reddit, etc).
4. Students have a right to not have their time wasted. I will not assign meaningless assignments or busy work. I will make sure that lecture time is used for learning new material, not rehashing the same material over and over again. In order for this to work, students need to be prepared for class. Any assigned readings or videos must be completed before class as the lectures will build off of those topics. If you miss a class, you are responsible for getting caught up on the material so you will be prepared for the next lecture. In order for most of the lecture to be used to teach new material, everyone needs to be familiar with the old material.
5. Students have a right to not be overloaded with work. I understand that this is not the only course you are taking this semester, and it should not dominate your time. I also understand that part of the college experience is non-academic. I will ensure that you have plenty of time to complete each assignment, and that the deadline is not so close that you must drop everything to complete it. I will respect your breaks. Spring break is not an extra week you have to work on assignments. Spring break is your time to spend how you wish. So while you may have an assignment given to you before the break, you will not be expected to work on it over break. It will just be given early so you can start early if you choose.
In order for students to not be overloaded with work, they will have to manage their time wisely. By starting assignments early, students can spread the workload out over several days or even weeks, and identify any problem areas early. Also, I cannot coordinate with other instructors about the dates of midterm exams, but they do tend to fall in the same periods of time. However, if you are actually learning the material throughout the semester and not relying on cramming the night before, this should not be much of an added stress.

Instructor Rights and Responsibilities

1. The instructor has the right to have a life outside of class. Please respect that this is not the only course that I teach, and that I will not always be available for help. Please do not show up at my office unannounced. Understand that it is fine to send emails late at night, as long as you recognize that I won't read it until I get to the office the next day. In order for me to have this right, I also have a responsibility to make sure my work is done on a timely fashion. Assignment instructions and expectations need to be clear and available early to give students time to ask questions and get a response. I need to be responsible for responding to emails within 24 hours, and I need to hold to my office hours so students can get help then.
2. The instructor has the right to not be overloaded with work. Just like this is not your only class, this is not my only class. Please remember that I have over 170 students this semester, so what may seem like a small request can really add up if enough students ask for it. One way to help

with this is to make sure you are prepared with specific questions when you ask for help. That way we will be able to quickly identify the problem and find a solution. Much of the responsibility for this falls on me. I am responsible for my time management so I can avoid be overloaded with work by making sure assignments, lectures, and exams are prepared in advance so I am not scrambling at the last second. By creating clear instructions and expectations, I can avoid answering the same questions for all of the students as well. Perhaps most importantly, I am responsible for ensuring that the TAs stay on track with their grading responsibilities, to prevent a pile up of grading at the end of the semester.

3. The instructor has the right to not have his time wasted. Time is a limited resource for all of us. Even minor requests can add up, especially with the number of students that I have. It's a common misconception that emails don't take any time out of the work day. Every email I get takes on average 5 minutes of my time to read, find the solution, and respond to it. That means that responding to 12 emails can take about an hour, so they add up quickly. I ask that before you send an email, try to find the solution yourself. Is that information on the syllabus? Did you re-read the assignment instructions carefully? Did you look in the slides for an answer? Did you try debugging your program? I don't want this to sound like I don't want to help you with problems in the class, I am here to help. But it does get frustrating responding to emails with questions like "When are the office hours?" "Where is your office?" "When is the assignment due?" "When is the final exam?" Please try to answer the question yourself first, and when you do ask me a question, please ask a specific question and provide as much information as possible.

Again, this right comes with some important responsibilities on my end. I need to make sure that information is available and easy to find. I need to make sure that instructions are clear. I am responsible for teaching you how to test and debug your code.

4. The instructor has the right to a positive work environment. Side conversations, rapid mouse clicks from gaming, phones, packing up your bags five minutes early are as distracting to me as they are to your fellow students. Often times it can be worse. Many of the lecture halls are actually designed acoustically so questions asked in the back row carry to the front. This means your conversations carry to the front as well. The way the classrooms are set up also means that even if I'm not looking directly at you, you and your neighbor pointing at your laptop screen and silently laughing is still visible to me, and again, distracting. Again, I am also responsible for creating this positive work environment. By allowing and welcoming questions, I avoid you asking your neighbor that question.
5. The instructor has the right to be treated like a professional. All of your instructors and TAs have worked hard to get where they are, and have a wealth of experience in our field. While I don't have a degree in education, teaching is a passion of mine, and I stay up to date on the research in the field and attend conferences to help become a better educator. I chose to become a Lecturer because I love to teach, not because I couldn't find work elsewhere or as a stepping stone into a non-teaching career. The decisions I make about assignments, lectures, topics, exams, and grading are made intentionally and with a lot of consideration. I ask that you respect that. It is fine to ask for clarification on your grade, or to point out what you think are mistakes, but don't tell me that something should be worth more or less points than I put on the rubric. I

know at times you may find yourself thinking “why on earth are we learning this?” Some of these topics and concepts may not seem important when it’s an assignment I expect you to complete on your own in a few hours, but they will be important when you are working on a team of 12 people on a project that will take a year to complete.

Now this also comes with a lot of responsibility on my end. I need to act like a professional. I need to have justifications for the decisions made in class, and I need to make sure those decisions are transparent.