#### Professional Tips for Collaboration:

- 1. Asking for help is not a sign of weakness and rather an essential skill for making progress
- 2. Open up to the people you are working with as you are going to need to know each other's skillsets
- 3. Struggling is okay, floundering is not. Feel free to ask for help
- 4. There are no right or wrong answers, some may be better suited to the task at hand than others but do not dismiss groupmates when they think of a different solution.
- 5. When referring to any work done say "we tried" rather than "I tried". You are a team and all efforts should be considered an effort of the team.
- 6. Establish ways to communicate clearly and respectfully
- 7. Aim for each person to contribute a fair share of work (not results). Knowing what does not work is just as valuable as knowing what does.
- 8. Resolve misunderstandings quickly rather than letting resentment and distrust build. Support each other when someone inconveniences the group with good reason, as this is bound to happen over a 14-week period.
- 9. Respect group decisions, even if you favored a different approach.

#### Helpful Links

For those of you who just cannot get enough of this pamphlet and are wondering, "where can I get even more of the knowledge presented in this wonderful resource," you are reading the right page. Below are links to the professional sources I have included throughout this pamphlet.

Dr. Austin – <u>austind@gvsu.edu</u> for general questions.

What is Pic Math?

- bit.ly/maa498

Article on Procrastination

- bit.ly/procrast498

Article on working well together

- <u>bit.ly/groupwork498</u>

# Math 498 Guide

## Made by a student for students What to expect:

Since this is a PIC Math course (preparation for industrial careers), the goals are to improve student's abilities to

- problem solve
- think critically and independently
- collaborate
- and communicate professionally

As a student who has formerly taken this course, I would say to also expect

- the unexpected
- to bond with groupmates
- a challenge
- and satisfaction and enjoyment

Since Math 498 is probably unlike any class you have had, keep an open mind about what you are going to learn over the course of the semester.

## Ensuring your group is a Lean, Mean, Problem-Solving Machine

At this point you have a healthy amount of experience in Mathematics and maybe statistics, and/or computer science as well. This course is less about learning new content and rather about learning how to use the skillsets you all have amassed individually as a group to solve real-world problems effectively and efficiently. Therefore establish,

- 1. short-term and long-term goals
- 2. the different methods to potentially accomplish those goals
- 3. and then identify best method(s) to accomplish said goals.

#### Also identify,

- the skillsets of each member and how they can be used to accomplish such goals
- subgroups to break up short-term goals if applicable and set a date to reconvene.

If you ever feel as though you are without direction or running into the same issues, Dr. Austin and your liaisons are great resources and more than willing to help you. Dr. Austin captures this idea well in saying, "struggling is okay, floundering is not."

## Tips to Successfully Communicate Professionally

Your liaison(s) know that you are students who likely have limited experience communicating professionally. However, you should strive to keep your communication with them as professional as possible. Attempt to

- use proper grammar and a salutation
- be honest and open
- present the information needed with little "fluff"
- question the necessity of every email/meeting.

Your liaison(s) may lose confidence and/or trust if you do not proofread emails or are not upfront with them. They also are busy people and would like information to be conveyed efficiently. Dr. Austin is always willing to read an email and confirm that it is an appropriate time to send one.

# Understanding and Overcoming Procrastination

As someone who waits until the last possible moment to do anything, a strategy that helped me stay on top of my work for this course was to consider the last possible moment, the moment before meeting with groupmates rather than with the professor or your liaisons. I did not want to disappoint my groupmates and neither should you.

"Procrastination is not bad, letting procrastination affect groupmates work/learning/progression is bad."

-Dr. Austin.

## Professional Tips for understanding and overcoming procrastination:

- Consider the feelings that lead to procrastination and how you might change them
- Break a big task into smaller pieces and set dates to accomplish them by
- Work in surroundings with few distractions
- Know yourself. If seeing a lot of work to do intimidates you, try to have a more flexible schedule, if a rigid structure makes you comfortable, then make one.