

Math 105 TOPICS IN MATHEMATICS
RULES, POLICIES AND PROTOCOLS
— STUDENT RESPONSIBILITY —

January 21 (Wed), 2015

Instructor: Yasuyuki Kachi

Line #: 52920.

The present document highlights our rules, policies and protocols. This is extremely important: Read this as the **contract** between you and me.

The present document follows the recommendation by an official KU guideline.* It addresses the issues which KU expects its instructors to clarify to students.

Before everything, I want to address some serious matter head-on. Oh, please don't get freaked out. Relax. This is something you don't ever have to worry about if you are an academically honest and conscientious student, always act with common sense and with integrity.

No other websites which refer to this class taught by Kachi are official. Students are strongly advised not to pay attention to sites which are not endorsed by Kachi which claim to 'help' students in this class, or otherwise claim to be 'informative' about aspects of this class. Anyone who attempts to describe contentious material about this course, about Kachi, or about his TAs on a public domain is hereby reminded: Public ridicule, libel and slander are serious civil offenses, and those are at times serious criminal offenses.

★ The above statement is legally ascertained.

*Called "Keys to Civility". Downloadable at

https://documents.ku.edu/policies/Student_Affairs/Civility_Brochure.pdf

- **Professor Jeff Lang operates in the same way.**

Now, in case you worry that my style and practice are uncommon: My esteemed colleague Profesor Jeff Lang also operates in the same way, namely, he clearly spells out his rules, policies and protocols, strictly sticks by them, and he tells his class that he sees them as his contract between himself and the class. If you are skeptical, just ask him.¹

- **Math 105 is a multiple section course. You are free to switch sections.**

Math 105 is a multiple-section course (the other section is an ‘on-line’ class). When you signed up for this class, my name and the other instructor’s name were posted. So, what does this entail? Yes, students get to choose either to take the class from me or take the ‘on-line’ class. On the other hand, in case you wonder, I don’t get to choose students. You have chosen this section knowing that this is a lecture style class, as in you have to show up, and is taught by someone named Yasuyuki Kachi. So, what does this entail? Yes, students are free to switch sections . I cannot force you to stay in my section. Some of you will not like what you see in this document. So, if you don’t like what you see in this document, then go ahead and switch sections. No hard feelings.

Here, I need to stress: Most importantly, I am neither saying that we should teach to the students’ approval rate nor should we teach out of the proportion to alienate students. Rather, as a professor I know hundred different students have hundred different learning styles, and hundred different professors teach in hundred different ways. So, naturally, there is a ‘mismatch’ problem. This is no matter how you teach the subject.

So in any case, if you feel that you and I are a ‘mismatch’, then that is okay, nothing is personal. Mathematics Department enrollment officer Ms. Lindsey Deaver will be happy to help you switch. .² (There is a time line when it is possible to switch and when it is not, so please see Syllabus ‘notable dates’.) On the other hand, if you decide to stick with me, then please refrain from complaining about me enforcing the rules in this document, because I gave you a timeline to choose to stick with me or switch.

¹Dr. Jeff Lang’s email address: haras@ku.edu

²Ms. Lindsey Deaver’s email address: impalalp@ku.edu

- Students will be allowed to miss one homework assignment and one quiz. Members of the class are encouraged to study together, but each must write out their own solutions to the assigned problems. Homework and quizzes are major parts of the learning process, and it is essential that students work their own problems, and turn in homework and quizzes by the due dates. **Please make sure to staple your homework papers before you turn them in.**
- **No make-up exam policy** (see also page 20).

In what follows the term “make-up exam” refers to an exam administered to some member(s) of the class at a time different from the pre-announced time and day for the same exam for the class. An exam administered at KU Disability Resources with the same starting time as the regularly scheduled exam is not considered as a “make-up” exam.

I will not give you make-up exams under any circumstance, with the following exception:

The only instance I grant you the opportunity to take the make-up: you are scheduled to take three in-class Final exams on the same day, including the one for this class, during the University-designated Final Exam Period, none of those in-class exams is a ‘flextime’ exam, and moreover 105 is the highest course number among the three.

(Here, a ‘flextime’ exam is an exam which students get to choose when to take.)

Note that emergencies will not make a difference. If you had to miss my in-class exams due to an emergency, or for whatever reason, it’s just tough luck. Sorry. However, good news: Even though it is generally true that missing one in-class exam causes an adverse effect on your grade, my grading scheme is designed in such a way it is still possible to recover from the loss:

- (1) Keep in mind each exam has a “take-home” portion. Missing the “in-class” portion of an exam does not mean your score for that exam is 0. Typically, the point-allocation for each exam is

“in-class” : “take-home” = 50% : 50% (ballpark).

(2) There are multiple ways to earn extra credits, namely, through an Extra Credit Homework, and also through the extra credit portion of the quizzes and the exams.

I strongly recommend that you do all the extra credit assignments and also any extra credit portion of quizzes/exams whenever included. These make it theoretically possible to earn the letter grade of A even with a miss of one “in-class” exam. However, please also be aware that any extra credit you have incurred will be “pro-rated” by your attendance rate. Thus I also strongly recommend you to regularly attend classes.

- **Cheating - Zero tolerance policy:**

Cheating on exams is a serious form of an academic misconduct, it undermines the students’ confidence in the system, and will not be tolerated. I take appropriate actions to preserve the integrity of my class and the institutional integrity of KU. (An) offender(s) can get caught red-handed, or be identified later as the evidence transpires while grading. A part of the standard procedure is for me to file academic misconduct charges and recommend sanctions. If there is no prior charge filed against the same student, then I award 0 points for the exam on which the student has committed cheating (for both ‘in-class’ and ‘take-home’) and then further lower the letter grade by one letter (C+ → D+, *etc.*). If this is a repeat, then I recommend harsher sanctions, that may include an F for the course and transcript citation.

- **Students’ Responsibility:**

It is students’ responsibility to attend classes. **Please be reminded that your letter grade is partially based on your attendance** . If a student skips all the classes and just crams for the exams, then the student will not receive better than a B grade (please see syllabus ‘Grading Scheme’). If a student claims he or she cannot attend classes because he or she goes to office hours for other classes, is employed, or has an obligation of parenting or has to look after a family member (or to celebrate a family member’s birthday), it is not a valid excuse.

When you are found habitually absent, **you will receive an**

1. **Academic Alert** . If the problem persists, then you will receive an
2. **Academic Advisory** . If the problem still persists, then you will receive an
3. **Academic Warning** .

Note that Academic Warning being issued to you means you are identified as an ‘at-risk’ student. At that point **I will file an academic warning report to Associate Chair, Dr. Margaret Bayer** .³ Expect sanctions such as expulsion from our class roster.

However, this scenario happens most likely when that student ceases to communicate with us (my TAs). If a student stopped showing up, I always like to know whether an emergency situation caused that person to miss classes. What is considered as an emergency is ultimately a judgment call and I reserve the right to make the judgment. (When I do so, I am aware my integrity and academic conscience are on display.) Depending on my findings and with appropriate documentation, I may grant waiver of absense. It is KU’s norm that a death of an **immediate** family member (a parent, including a legal guardian, a child and a sibling, but **not a grandparent**) would warrant a leave of absence up to five consecutive business days.

- It is in my best interest that the knowledge and skills as dictated by the curriculum are successfully transmitted to you. With the aforementioned policy, the final letter grades the students will receive will reflect more accurately how much this goal has been acheived.

- I expect you to be a **reasonable, mature, and respectful** human being. I do my best to be that way. We respect the integrity of the learning environment we are in. This is the boundary I define. Disrespectful behavior and misdemeanor include, but are not limited to: Chatting, singing, reading a newspaper or other irrelevant material, open irrelevant sites on your laptop, using cellphone or other electronic device (including textmessaging), playing a videogame, threatening me and/or other class members (see also page 13).
 1. First time violators will receive an **Academic Alert** .
 2. Second time violators will receive an **Academic Advisory** .
 3. Third time violators will receive an **Academic Warning** .

(See above.) **Repeated infractions will result in a permanent dismissal from the class, and the forfeit of the credit.**

³Dr. Marge Bayer can be reached at bayer@math.ku.edu

- **Another consequence of missing a class. What you should not expect.**

When you miss a class, we are not obligated to repeat the lecture that you have missed in front of you. You cannot demand us that this is ‘help’ you are entitled to receive. This is not at all a common practice. No university regulation dictates that students are entitled to request for a duplication of lecture. Thus please do not expect it. This is regardless of the reason you had to miss the class. While communicating with students, sometimes it happens that we detect that the student has a hole in understanding the materials and can attribute it to the fact that the student had missed a particular class period. When we inform you so, please understand that it is not an accusation. We can make a suggestion what exactly you need to study to catch up. Please understand that it is within my discretion to offer such a suggestion.

- **E-mail correspondence:** Please see also page 16–17 for ‘Email etiquette’.

Once again, this is a large lecture course. I have my TAs (Ms. Smita Praharaj, Mr. Oguzhan Batmaz and Mr. Chengzhen Fang) take care of your questions and needs. They hold office hours (at Snow 151, the hours are found on the Syllabus), but you can also reach them by emails. (Please find their email addresses on the Syllabus.) I ask that you email me only when it is absolutely necessary. Otherwise please communicate with one of the three TAs. I would say that most of what you feel you need to bring to our attention does not have to go through me. However, there are instances where the matter requires my attention. To list some instances I want you to write to me directly:

- **Examples of instances you are required to write to me:**
 - You want to add my class.
 - You want to withdraw from my class.
 - You have to miss an exam.
 - You are in an emergency circumstance, you are injured or are in a critical health condition.
 - Your immediate family member(s) are in an emergency circumstance, or a death of your immediate family member(s).
 - You are either a student-athlete, a team manager/trainer, or a marching band member, of the NCAA athletic program of KU, and the schedule necessitates you to travel.

Things of these sorts need to be brought to my attention.

- Now, in addition, I don't mind receiving emails from students of the following nature:

Examples of the content of emails whose nature does not require me to respond to you immediately, and which I welcome to receive:

- Greetings.
- Your update, you graduated, you moved, you got a new job, you got married, you just had a baby, you adopted a little puppy, *etc.*
- You spotted me on campus and missed the chance to say "hi".

These types of emails I always welcome you to send me anytime.

Here is my email address:

- **Kachi's E-mail:** kachi@ku.edu
- But once again, please know that my three TAs, Ms. Praharaaj, Mr. Batmaz and Mr. Fang, are your main correspondent, they are more than happy to talk to you. If you have any questions or concerns about any aspect of this class, I encourage you to email them. They are all very relatable, and will be your good sounding board.

Now, a disclaimer: Communication through emails is a courtesy on our part. When you e-mail, and you expect a reply from our TAs, they normally respond without delay. However, I cannot guarantee that you will receive an immediate reply from them. Once again, we are offering you an opportunity to communicate through emails as a courtesy. It is important that you understand this scope. No university regulation dictates that a student has a right to demand us to respond to her/his e-mail.

- When I teach a small size class ($25 \pm$ students) and with no assigned TA, I get to know my students better personally, I hold office hours myself, and also give my students opportunities to communicate with me directly through emails. Within my workload (and other constraints including, but not limited to, the class size of the other class(es) I teach) I can afford to pay a somewhat more individualized attention on each student. I do not know how much of the content of the next one and half pages are applicable to this class, because this is a large lecture class, but let me include it, just in case.
- **Policy on personalized attention from me.**

Sometimes, you may receive personalized emails from me. Sometimes I simply say ‘hi’, some other times I note my assessment of your performance and progress. Sometimes I email you to note a mild critique of your work, to further articulate the reason for my editing and grading of your papers, when I am convinced that it helps the student. Sometimes I give students tips to keep up the good work, and words of encouragement. Doing all this is an extra curricular activity. My work load (as a research mathematician myself and also as a Ph. D. advisor, training my graduate student to earn a Ph. D. and become a future research mathematician) makes it hard to find time for such an extra curricular activity. (See a separate document “Background Information”, item “*A math professor’s day*”.) Also, no university regulation dictates I am obligated to do such a thing. Nevertheless, I sometimes do it, because I find a joy in caring about my students, and this is one way to show that I care about my students. But please do not count on it.

If you ever receive a personalized e-mail from me, you do not have to give me a credit. Please just acknowledge that I did it as a courtesy. Most importantly, please understand that whenever I do it it is out of my good will.

- **Representative examples of my email to students.**

From: Yasuyuki Kachi <kachi@ku.edu>

Dear John,

First of all, you have not missed a single class, which is impressive, John. Also, you have turned in every single quiz, which is a very good sign, John. Overall you showed a very solid performance, John. Now, I have some comments on your most recent quiz:

First, about problem [I], you threw the correct eigenvalues on the bottom line of page 1. However, you messed up the next step. Now on page 2, you seemed to have lost how to proceed. Could you please consult my solution (posted) and study this, John? Next, problem [II], page 5, the right answer for AA^T is “I”, a mistake a little uncharacteristic of you.

Maybe you ran out of time? (Perfectly understandable, as you told me your intense work load this semester.) The other quiz was actually perfect, John. If you take care of the above I think you are ready for the forthcoming test, John. Once again, you are doing a great job so far, John. See you Wednesday.

with best wishes, Yasuyuki Kachi

_____ ◇ _____

From: Yasuyuki Kachi <kachi@ku.edu>

Dear John,

Congratulations, you got perfect on the midterm!! You impressed me, John. I think you are in great shape, John. You correctly understand the concept of eigenvalues. That’s the key, John. See you at 10 in class.

with best wishes, Yasuyuki Kachi

- Some students actually find this annoying, they express they do not appreciate this type of e-mails, and ask me to leave them alone. They make it clear they simply do not want a personalized attention from me. I perfectly understand. Thus, if you do not want to receive e-mails from me, or any other form of a personalized attention from me, would you please specifically request it to me before Tuesday, September 2nd class. However, there is an exception. An email warning will be issued when you fail to observe the boundary (see page 13).
- **Students must pay attention to my lecture.**

Students are obligated to pay attention to my lecture under all circumstances.

Some students may acquire a false perception that the subject matter covered in Math 105 is rather trivial. This may likely happen during the first unit of the semester. This is because of the nature of mathematics as a unique scientific discipline, that mathematics is utterly hierarchical. Any mathematics course at any level always starts with ‘foundations’, upon which everything else is built. You can count that, by the second unit of the semester, you will find the subject matter more intellectually stimulating. Repeat: Students are obligated to pay attention to my lecture under all circumstances. Also, **please do not pressure me to quit lecturing when the time is approaching to the end of the class time.**

An exemption: Some students feel they are “super-duper good”. If that is the case with you, then you will find plenty of opportunities to prove that you are indeed “super-duper good”, over the course of the semester. Such opportunities arise, for example, when I assign extra-credit homework, some of which require skills only a future mathematician (you might potentially be one) possesses. If I see that you indeed are super-duper, then I will endorse your “I’m super-duper” attitude in class (yet, needless to say, I do not allow you to commit any form of a misconduct or disruption of class), and also give you a special assignment. My chance of encountering what I call ‘super-duper’ students is one in every ten years. (Note that this number is rather anecdotal.)

However, I never entirely dismiss the possibility that there is such a student sitting in my class. Count that I will just know it, and I never miss it, when this happens. As a professional mathematician, I have a skill to detect mathematical talents. So, I am giving you options: Either you follow my instruction and pay close attention to my lecture, or prove to me that you are “super-duper”. Statistically, the vast majority (99.9%) of students in my class choose the former.

- **How I spend my class time.**

I spend most of my class time transmitting mathematical knowledge, skills, and ideas within genuinely mathematical contexts/framework. I may occasionally spend some of my class time covering real life metaphor of some topics which originally stem from genuinely mathematical sources. I will spend some of the class time going over some bureaucratic matters, such as the schedule of exams, due dates of homework, quizzes, reminder of holidays, etc. Finally, I am entitled to spend some of my class time going over a historical or a philosophical context pertinent to the subject matter, and also my own view or perspective of the subject matter, when I believe that those will reinforce the students’ understanding of the subject matter. On the other hand, please do not expect that I will, for example, take the entire class to Potter Lake and play frysbee. It will not happen. Students’ demand or criticism will not in any way affect my choice how I spend my class time.

- **Designing exams/Choosing exam problems.**

Exams are identified as major tools to assess to how much extent our goal of successful transmission of mathematical knowledge and ideas has been achieved. Each time when I write up an exam, I exclusively use the criteria whether each of the given set of problems

1. has a meaningful consequence, and
2. plays some role in a broader mathematical context,

when I decide whether to actually adopt each of the set of problems I have in mind for the exam. Most importantly, whether the students liked or disliked the exam is never a good indicator of the appropriateness of the exam. This is because students do not hold a professional expertise, and are generally not mathematically mature enough to be able to make a sound judgment as to whether a problem meets

the above criteria. I will not listen to students' expression of how they felt about the exams, because it does not in any way help achieve the aforementioned 'goal'. In other words, administering 'popular' exams is never my priority. Please know that you can in no way influence my mind when it comes to designing exams.

- **Pitch:** It is best to avoid any sort of conflict of interests. I expect my students to understand that under no circumstance the academic standard will be compromised. It is always the case that, with a more cooperative body of students, success of each student is more likely to be achieved, and the intellectual benefit for each student will be optimal. Many of the unfortunate scenes in mathematics classrooms at the college level can be avoided, if it is fully explained the existing discrepancy between the nature of mathematics as a science discipline and the popular perception of mathematics which is seemingly influenced (and sometimes skewed) by the modern social and cultural standards/trends. (I am not making a reference to the lifestyle of college students.) To help you better understand the course goal, and to help you stay on the right track throughout the semester, I prepared the 'pitch'.

- **Disclaimer — Diplomatic Immunity.**

Some academic units within KU may *potentially* be tempted to flex their muscles to influence how mathematics should be taught in those courses offered by us, the Mathematics Department, to cater to their specific needs, citing this is the way the society demands (not that I actually know of any example). Some students I've encountered in the past tried to emulate such a gesture, sounded as though they represent one of those academic units, and pressured me to teach the way they please. According to the official KU document "Keys to Civility" (which I cited on page 1 of the present document):

"Some things must remain areas of instructor discretion, not subject to negotiation with students. These include course content, criteria for understanding/performance, nature and timing of assignments (in and out of class) and use of class time."

So, in essence, those students should forget about the notion they can possibly change what I teach or how I teach. At the same time, those students will be certainly benefited by the mathematics courses offered by those outside academic units with an emphasis of how mathematics is applied in their own discipline.

Let me stress: We, Mathematics Department, offer a wide variety of math courses, some open to everybody, and some open to math majors, and we, Mathematics faculty members, are best positioned to teach those courses as we are the experts of math in this campus. How mathematics should be taught *in our own courses* should strictly go by our opinion and consensus as experts of mathematics, and nothing else: We practice our self-imposed discipline “teach mathematics as mathematics” which we know is the best, and no students will dictate to do it otherwise. You should know Mathematics faculty has such a “diplomatic immunity”. This is like faculty elsewhere on campus.

- **Never say “don’t take it personal”.**

I will issue

1. an Academic Alert ,
2. an Academic Advisory , and
3. an Academic Warning ,

when you fail to observe the boundary as I define, or you refuse to show respect to the integrity of the learning environment I create. Most common reaction by students when they receive such notices is that I take things too personally. These notices are not personal. I will dismiss it as your lame excuse to escape. An example of when you receive 3. Academic Warning immediately: Storm out of the classroom, and say “I will go get my big brother and will be right back”. This is reasonably interpreted as a ‘threat’. See page 26 ‘Misconduct’.

- **What you see in Math 105 and what you value in the context of the modern pop subculture have little in common.**

Students often misinterpret what I refer to as intellectual stimulation and intellectual fulfillment as “instant gratification”, where the latter refers to one main characteristic of the modern ‘pop subculture’. Please understand that, no aspect of Math 105 course reflects the kind of an entertainment value ‘music videos’ can provide, for example. Here, I am not talking about whether we should or should not endorse the lifestyle which is portrayed by the media as being consistent with the pop subculture.⁴ Occasionally I do not shy away from pointing out my students’ aforementioned misconception which seemingly results from the fact that their mind is significantly influenced by the media. When this happens, I expect my

⁴It makes sense to offer a course which addresses this type of issues, but not in a course offered by the Mathematics Department.

students to understand that it is not meant as an accusation. It is my detection of your confusion. Please do not take it personal. Rather, you should find the information useful. (I have elaborated this issue in my 'pitch'.)

- **Laptop use in class. No cellphone use is allowed in class under any circumstance.**

You may bring in your laptop to my class. This is because my notes are posted on-line in my course webpage (please see Syllabus for the URL). Alternatively, you may make hardcopies of the materials and bring them to class. Students are never allowed to do something else with their laptop during class. While lecturing, I will make sure no one in class commits such an infraction. It will warrant an Academic Alert/Advisory/Warning, depending on whether it was a repeated infraction, plus the loss of attendance credit for that day. Some cellphone carries the same feature. However, I do not allow students to use cellphones in class even if your cellphone can show my notes. Cellphone may not be used as a substitute of a calculator either. (Please see Syllabus for the designated calculator models for Math 105.) Once again, **cellphone use during the class period is strictly prohibited.**

It will warrant a warning, and a repeated infraction may result the loss of attendance credit for that day.

- **Homework policy. Attendance required for Homework to be graded.**

I will accept your homework and take-home quiz papers on the due date, with the condition that you attend the class on that day. I will not accept late homework or late quizzes (unless there was an extraordinary circumstance). You may not ask somebody to deliver homework or quiz papers. If you leave the class in the middle of the class period of the due date, then your homework is invalidated. I will return the homework paper to you without grading. Please understand that, I will make one attempt, **and only one attempt**, to hand the papers back to you. If you refuse, then I consider the ownership of the paper is abandoned. Also, any type of infraction as described above will be a cause for invalidation of the homework and quizzes.

- **Please save your graded papers returned to you.**

At any point during the semester, I may request you to re-submit graded exams, quizzes, regular and extra credit assignments. **Please save those materials.**

- **Liability for damage of the submitted papers.**

Accidents happen. Rarely, a part of or the entire papers you submitted can be disassembled, torn apart, or tainted by an ink, or can acquire some other form of a damage, as a result of an inadvertent mishandling by either the student before submission, or us after submission. If this happens, we may use scotch tape and some other method which we find appropriate to do our best to restore the shape of the materials. If you feel strong about taking a legal course of action to seek compensation, and/or punitive action, please understand that things of this nature should not be a cause for punishment or reprimand or monetary compensation. Please also be reminded that, the previous paragraph highlights under what condition the ownership of submitted papers are considered to be abandoned.

- **No authority, organization, or a party can challenge or influence my assignment of grade, or re-label the course number.**

Please understand that I give you a credit and assign you a letter grade based on my assessment of how much your work is worth, following the grading scheme (see Syllabus). When I assign your final letter grade, it is final, and it is not negotiable. Needless to say, whenever I do this task, I prioritize fairness, and do it with my utter professional conscience. A political pressure cannot make me compromise.

As far as your transcript is concerned, all you will ultimately receive from me is a credit for Math 105. Here, how your credit received from me is interpreted, or how much it is considered worth, outside of the Mathematics Department, or outside of KU, is none of my business.⁵

On the other hand, **under no circumstance I will ever be able to re-label the course number and give you a letter grade for any course other than Math 105.** The Mathematics Department receives an inquiry, from parties outside of the Mathematics Department, of whether this is feasible. The answer is flat and clear, no. On the other hand, suppose you are eager to do mathematical research with me, meaning meeting every week and working together side-by-side, either at an undergraduate level, or at a graduate level. Then it is an entirely different story. I have the prerogative to create an account for you (in Math 699 or Math 799) and assign a letter grade based on the intellectual merit and the impact of the research you and I have done together. This is subject to my approval. **You have to do research with me** in order to get such a credit.

⁵I often sympathize with my students concerning aspects of how the credit transfer works.

Please understand that, you may not use a third party, to influence and bend-and-break our policy, no matter what logic you use. If you rely on a party which, in your perception, has a political power over me (an outrageous example of which being the President of the United States), then there is a legal issue. There has been such an attempt in the past (but of course no US president involved), and the final outcome of that case was consistent with what I view as desirable. My understanding of the case is that the motivation was in part financial and in part a faster lane for the degree. I warn you. If you pursue such a course, then it can have long-term consequences and repercussions — unless you are determined to intimidate someone to lie and to join a conspiracy to commit fraud, and willing to pay for the consequence. Think twice.

- **Email Manners and Etiquettes — Always address the recipient.**

Whenever I email, I always address the recipients. This is a matter of etiquette. I try to show respect to the recipients of my email. I always start my email to my students as follows:

Dear Ms. Henrickson, ...

or

Dear Mr. Self, ...

Sometimes I use their first names, as in

Dear Bill, ...

or

Dear Bonnie, ...

if I come to know the student is more comfortable that way. Now, I ask you to reciprocate my respect. Thus, I hereby ask you to start your email with

Dear Kachi, ...

If you want to be more casual, then please write

Hi Kachi, ...

Hey Kachi, ...

or just

Kachi, ...

Some students are courteous enough to write

Dear Professor Kachi, ...

Hi Professor Kachi, ...

Dear Dr. Kachi, ...

or

Dr. Kachi, ...

and these are all appropriate. However, attaching my title is optional, depending on your preference on the level of formality.

Once again, my three TAs are eager to communicate with my students through emails . However, I have to also tell you the following: Often, we receive a massive amount of emails from students (this tends to happen before exams). Some ask about extra information about the coverage of the exam, some ask about their “current” grades. Some set the tone we are obligated to respond. Some insinuate that they are our ‘boss’. I do not want to throw you off, but I want to make clear: No body is a boss of anybody. I am in charge of this class, and my TAs work with me as a team. It is a courtesy on our part to respond to your email equests. A bad example:

Student A. *“Hey, you write a recommendation letter on my behalf. Make sure you say I’m some ‘smart-ass’. Mail it to Duke (/Yale/Stanford) MBA Program admission office by such and such date. Don’t forget you give me a copy and see if my parents like what they see. FYI they have donated gazillion dollars to this school, they can mess with you if they so choose, do we understand each other?”*

This one I just made it up. No one has ever sent me an email like this. But just in case, please never sound like this, when you communicate with me, or my TAs (the latter if applicable). More on recommendation letters on page 25.

Having said, I understand where you are coming from. Namely, if you are a student, it takes just one click to get from your professor or TA what you want; such as some extra information about the exam, and ask some other benefits. Email is so easy, so who wouldn't take advantage of it? But sometimes I sense that students forget about respecting the value of our time, and how much of an effort it takes for us to secure time to prepare for the classes (for professors), grade your papers (for professors and TAs), and take care of other aspect of your learning, all while engaging in research (for professors and GTAs), and train our Ph. Ds (for professors).

As for this I cannot stress too much the nature of our (professors') job, our "**dual**" role as faculty at Mathematics Department at KU, which is a major public university (= flagship state university): We (professors) are all research faculty, namely, we publish scientific articles first and foremost, and then we have the teaching obligation on top of it. Our (professors') job description is 50–50 of research and teaching. (More on this in a separate document "Background Information"). So, sometimes I have to say "please email me when it is **absolutely necessary**", but luckily, for this class I have the luxury of having Ms. Praharaj, Mr. Batmaz and Mr. Fang as my TAs. But it does not mean you can treat them disrespectfully. I request you to treat them respectfully, and I am sure they will reciprocate your respect.

- **Policy on announcement of the coverage of the exams.**

Many students ask us about the coverage of the exam. A "super-square" side of me would just say:

"I clarified in class. If you missed that particular class meeting when I have released that information, then it is your loss."

"You are responsible to know everything that I have covered in my class from January 21st until such and such date, in addition to all the prerequisite materials. This is consistent with the nature of the Exam, that it is meant to be comprehensive. It is a good idea to review all the quizzes, and homework problems."

But when I have an extra time to do so, I may exercise my discretion to send (or have my TA send, if applicable) an email alert, to the entire class.

- **Back to the email issue:**

Here, once again, under all circumstances, I ask you to follow the ‘etiquette’ as highlighted in page 16–17. Start your emails with “Dear Professor Kachi”, “Dear Dr. Kachi”, “Dear Kachi” or “Hey Kachi”. You might say this is so small, but it really shows your character, that you are a mature, conscientious, and respectful, human being.

Before the email era, no such opportunities existed for students, like what the current email system offers, to make easy requests and demands to their professors and TAs. Personally, a much bigger portion of my professional time is cut by having to deal with students’ emails (that is, when I don’t get TAs assigned to my classes), and that is due to the invention of the email system. Students know it is free, and students feel they can use our professional time unlimited.

I ask you to acknowledge, and respect, the fact that, we (professors) are in the research front, where the notion “time is money” and the dogma “publish or perish” rule. (More on this in a separate document “Background Information”). Please do not misinterpret that I said that I am reluctant to communicate with my students (or have my TAs communicate with my students, if applicable). It is on the contrary. Indeed, as I said earlier, I normally pay individualized attention to my students, when I don’t teach a large size class.

- **Under what condition I can make you feel intellectually fulfilled.**

At the same time, it is a part of my job to secure enough time to do everything else so I can teach you without compromising the level of perfection. So it is important that I do not have to spend time on the consequence of some students’ irrational and irresponsible act. Once again from the official KU guideline “Keys to Civility” (which I cited on page 1 of the present document):

“Both instructors and students should follow community standards for conduct.”

“They should know how their fellow students will react if they don’t meet standards for behavior. Instructors should be very clear about consequences of not following the group’s standards. And they should be supported by all students if consequences are delivered.”

To repeat some of what I said earlier, students cannot demand accommodation of make-up exams. Students cannot threaten my job security in doing so (see also page 16): Know that our Tenure is a (Constitutional) Property Right.⁶ You read in page 3 we do not accommodate make-up exams. Students think of this lightly, but giving make-up exams is detrimental to our academic proceedings. Let me elaborate:

- **Unfeasibility/Impracticality of giving make-up exams:**

1. A different exam needs to be drafted so that the students cannot exchange information about the exams with students taking the exam later.
2. A professor and/or TA monitoring an exam for a class of any size (30, 100, or 500 students), being present full-time, is efficient. A professor and/or TA monitoring an exam for a single student on a make-up exam is very inefficient and often the professor and/or TA has to leave the room for other duties, coming back every five minutes or so. This is disruptive to all the parties involved as well as it gives the student the opportunity to do things that are prohibited. Emergence of high-tech portable devices makes it easier for students to do so.
3. If one student is granted a request, then other students will often make the same request. Thus the necessity to produce multiple different make-up exams and multiple proctoring obligations both arise.
4. It is outside of Mathematics Department secretaries' obligation to proctor exams. Hiring part-time proctors may solve these problems, yet it imposes financial burdens on the Department. Also in many cases the credibility of individuals who are otherwise not affiliated with the university can be uncertain, and there is the issue of potential breach of the content and other forms of undisclosed conflict of interest.

Now, if you guys are all cooperative enough and neither my TA(s) nor I have to encounter those types of unpleasant or counterproductive dealings for the entire semester, then I am confident that I will be able to make you feel that being in this class was an overall intellectually fulfilling and stimulating experience.

To repeat, to the extent my time constraint allows me to, and provided you guys all act maturely and responsibly, I am eager to help you.

⁶“*On Being a Department Head – A Personal View*” by John B. Conway, 1996, AMS Publication.

- **Once the semester is over..**

Once the semester is over, until when I release the final letter grade, I ask you to please do me a huge favor to refrain from emailing me (other than, of course, if you are in an emergency situation where emailing me is absolutely necessary). That way I will be able to determine your final letter grade with a shorter amount of time. You will get to see your grade sooner. I know you are so keen to see your grade. Please cooperate with me.

- **Your final letter grade is not negotiable.**

Also, please understand: Once the final letter grade is turned in, it is final. It is not negotiable . I will never set up a meeting with you and “discuss” about your grade. You already had a chance to perform in a certain way so as to receive a desirable letter grade. At that stage, it will be too late to try to impress me and change my mind. However, you can request me to show you the graded final exam paper of yours, once I have released the final letter grades.

Needless to say, I always prioritize fairness. While grading, I am always conscious of the fact that my integrity and my professional conscience are on display.

- **The Scope of Homework Hints.**

I occasionally exercise my discretion to offer hints for the homework assignments. If hints are provided, you are strongly encouraged to use hints. Some students do not take advantage of hints, and submit papers which are less than satisfactory. Please know that the hints not only help you how to solve problems, but also provide ideas of how much work you are supposed to show on your paper. Also, sometimes I exercise my discretion to either change the problem itself, or change the scope of what is acceptable as a solution to the problem. Such a change will always be indicated in the “Hints”. Thus, regardless of whether you need Hints, please always make sure to check on “Hints”, for the possible change (whenever they are provided).

- **The Scope of Computer Software use.**

Students are not required to be proficient with mathematical computer software, beyond the usual calculator. Proficiency with computer software use is not a part of the prerequisite of Math 105. I never assign problems to merely test students' computer proficiency. Please note that, calculation performed by computer cannot be acceptable as a valid mathematical argument. There are websites where you type in the problem and it readily gives you the answer. Some students find it tempting to rely on those in their homework. My job is to make sure my students do not bypass the learning process and thereby lose the opportunity to learn the important underlying concepts. So, please do not use those websites when you work on the assigned problems. Here, please note that I did not say that I discourage you from learning how to use computer softwares.

- **The Scope of “On-line Services”.**

Please do not copy answers which you get from those “on-line services”, where you type in problems and either the machine automatically gives you answers or someone sends you answers, specifically for the assignments for this class. Now, I make it clear it is outside of my jurisdiction or responsibility to monitor your use on those “on-line services” outside of the context of official assignments for this class. Having said, I want to point out that, if you make it a habit to rely on those then that way you are “bypassing” the learning process, you are waiving your opportunity to learn the underlying mathematical concepts. That is what you are trading your (portion of) eight weeks of your time and your energy for. Please do not lose your sight: Improving your mathematical knowledge and skills is the purpose you are enrolled in this class. Please know that my TAs are available for office hours. They also invite questions through emails. Please take advantage of those opportunities.

- **The Scope of Review Sessions for Exams.**

According to my own experience, some KU students seem to believe that, extra sessions outside of the regular class time would not benefit students. In the past, I had students who were open enough to express their opinion that no study session other than the regularly scheduled class meetings be meaningful. Some said it should never be offered. Here let me clarify my position:

First and foremost, please understand the following scope: It is never a part of Mathematics faculty members' "obligation" to offer review sessions for exams. There is no University regulation that dictates that Mathematics faculty members have to do it. Mathematics faculty members "reserve the prerogative" to schedule review sessions outside of the regular class, and do it as a courtesy. Repeat: Here at KU, review sessions are offered on a courtesy basis. Personally, I somehow do not see that there is any harm done by review sessions.

On the other hand, it does not make sense to offer a courtesy if the intended recipients of the courtesy do not acknowledge that what they are receiving is a courtesy.

So, I will take a poll as to whether anybody in the class objects. Due to the nature of this job (see the separate document "Background Information"), I cannot guarantee you that I can find extra time to prepare myself for review session. However, whenever I have time for it, and nobody objects, I will positively consider it.

- **Plagiarism? (mainly applicable to calculus Math 115 or above)**

Depending on the type of the course I may occasionally assign "proof" problems. Now, when it comes to 'proofs', (whenever applicable) copying from my lecture notes is highly recommendable. As for which exactly part of the notes you are supposed to copy, you still have to figure out on your own. Most importantly, if you copy, then you will not be penalized for a plagiarism.

Repeat: In this class, copying my notes does not constitute a plagiarism.

In a 100 level math course (such as this one), emphasis on how to write up proofs is minimal. Yet mathematics is ultimately all about proofs. What's so vexing is, there is no "template" which you can use in all situations — Hundred different

proof problems require hundred different writing styles. Also, suppose you ask us, mathematicians, to offer a proof of the same mathematical statement ten times, we will probably write it in ten different ways. So the bottom line is, the only, and the best, way to learn how to write up proofs is to copy verbatim proofs written by someone who knows the subject.

You may get (somewhat) frustrated, but this is a process that requires patience. As you move up to the next level, you will have a clearer idea of what proof means in mathematics.

Now, all that being said, if you still choose to paraphrase what's in the lecture notes, that's absolutely fine, as far as you come up with a mathematically sound and rigorous proof. You will be given a full credit. However, statistically, many students who paraphrase actually offer something that falls short of a perfect answer.

So, either you take the risk and paraphrase it in your own terms, or you just go by this recommendation, namely, copy the proof from the lecture notes.

- **Hire tutor at your own risk.**

The KU Mathematics Department used to strongly discourage students from hiring a tutor. "*You may hire a tutor at your own risk. We are not liable for the intellectual shortfall you may incur due to your tutor's incompetence.*" That is what the Mathematics Department used to have its own faculty members pass along to our students. Now, currently, the Mathematics Department feels secure about the liability issue in any adversarial situation potentially inflicted by students or their parents for their dissatisfaction stemming from the discrepancy between the way we teach and the way their tutors teach, and thus is no longer concerned about our students' hiring of tutors. My opinion? You don't need one. I will teach you. Take advantage of my TAs' Office Hours. Period.

- **Advising Session.**

By the way, I will be able to hold an advising session with you, if you are interested in knowing more about research career in mathematics, and research mathematician's life-style, from a college professor's perspective. I am more than eager to spend time with you. Please just drop me an email for an appointment.

- **Recommendation letters.**

Students ask me to write recommendation letters. I am eager to recommend my students who are earnest, eager and qualified. The number of requests a faculty member at KU Mathematics Department receives from students per semester is typically three, and four at most. In my own case, while some semesters I receive no such requests, one semester I had actually received fifteen recommendation letter writing requests. Realistically, fifteen is way more than I (or anyone in this Department for that matter) can handle. Know that there is no University regulation that dictates that we are obligated to write a recommendation letter when a request comes. So, please know that either

1. I would say yes to your recommendation letter writing request, and actually write a letter on your behalf.
2. I would say no to your recommendation letter writing request, and do not write a letter on your behalf. (In this case, I do not respond to your follow-up inquiry.)

- **Policy on Visitors/Spectators.**

I normally do not accept people who are not officially registered in my class to sit and observe my class. It happened in the past, that a person whose name is not in my class roster was sitting in my class without asking my permission first. I asked the person to leave immediately. This is consistent with the Mathematics Department guideline. Some registered students who saw what happened criticized me that I was not appreciative or flattered. Please understand that this is not a show business. I would accept visitors in my class only with a legitimate cause and under an extraordinary circumstance.

- **Parents should never get in touch with me (or my TA).**

KU does not want its own professors/instructors to communicate with students' parents or other family members. (Below what is referred to as 'parent' includes other family members.) Thus please refrain from having your parents email us, call us, visit our offices or otherwise get in touch with us. When I receive an email from your parent, know that I cannot acknowledge or reply. Similarly, when I receive a phone call from your parent, know that I will just hang up. If your parent keeps trying to reach me, such an action might be deemed Academic Harassment, and an appropriate action will be taken. Also, if you tell me (or my TA) you will have your parent contact me (or my TA) over disagreement, then that is deemed a threat, and the student will be subject to an Academic Misconduct. Once I served as one student's advisor. An innocent and harmless idea that was broached was that that students' parents and I meet on the graduation day. Clearly no malevolent intentions. Yet the aforementioned rule impeded me from honoring that request.

- **Warning: Credibility of mathematical contents posted on a public domain that hit your keyword Google Search.**

Students always want extra materials from an on-line source. I am aware of the psyche of modern-day college students, which is that their course work has to do one way or another with the internet, or they don't feel like they have learned the subject sufficiently well in the class.

I would like to convey to you the following information regarding this, which is extremely important. When you 'Google' a mathematical keyword, typically it gives you back in a second a long list of websites that contain explanations on that keyword. Some websites may pretend, or appear, that they contain all the information pertaining to that keyword. However, the truth of the matter is, the contents of none of those websites are refereed by professional mathematicians. In other words, the mathematical contents that show up on your computer screen did not go through a peer review process by experts .

We, professional mathematicians, primarily rely on articles and papers published on legit scientific journals. Some of those journals indeed are 'on-line' journals, and they are still legit journals. We, professional mathematicians, are familiar with journal names and can answer when someone asks us whether a certain journal's name is legit. Of course, there are hundreds of legit though 'minor' journals whose names are unheard of by most mathematicians. Articles that appear in those legit journals were refereed by anonymous referee(s) (who is/are (a) mathematician(s)) appointed by the editor(s) of that journal (who is/are also (a) mathematician(s)). Only those articles that sustained such rather strict screening process by experts get published in the same journal. Thus you can count the accuracy of the contents of the articles in those legit journals.

On the other hand, there is one popular webservice, which is not a on-line journal, but rather it identifies itself as an ultimate 'free on-line encyclopedia'. The same webservice stores a massive number of webpages containing mathematical contents. Those webpages are the ones you and I usually get to see on our personal computer when we 'google' mathematical keywords. It is important for you to know: In that same free encyclopedia, anyone who has an access to the internet can freely change and overwrite its contents. So you or I can, hypothetically, 'vandalize'

their pages if we so choose. The next person somewhere in the world who happens to be viewing the same page which you or I have (again hypothetically) just purported to alter inappropriately is seeing that inappropriately altered page. And you or I neither need an authorized access to do that nor, as far as I understand, would get penalized. I do not know whether it is the case that on each page stored in that on-line encyclopedia, there is a person in charge who oversees its content and decides if any change or overwriting made by anonymous users was proper. My understanding is that is not the case.

Now, as I said, some of the legit professional journals are on-line journals. Many of them require authorized user-ship to be a subscriber, and they charge you a subscription fee. If you are a faculty of a university, like myself, then the university pays the subscription fee so I don't have to pay out of my own pocket to have an access to the articles in those on-line journals. Now, what you are interested in knowing is, whether you can get an access to those on-line journals. My answer is, this is an undergraduate level course. There are only a few journals I can think of that gear toward exposition of mathematics to beginners rather than cutting-edge research results, and publish articles which can be read by someone whose level of mathematical maturity and whose breadth of mathematical knowledge are those of undergraduate math majors. One is "*American Mathematical Monthly*", published by MAA (Mathematical Association of America). I don't know if this journal is available on-line (I can check.)

Back to those on-line encyclopedias. I never say that I am opposed to the idea to create such on-line encyclopedias. I take my hat off to whoever came up with the idea and actually created it. But I take the contents of those on-line encyclopedias with a grain of salt, due to the aforementioned reason. Not so long ago, my research partner and I were working on a certain problem, and we realized that there should be a formula whose hypothetical form being such and such. If such a formula was indeed already discovered by somebody, then that should be in that encyclopedia, on one particular page, which we know which page. That particular page of the encyclopedia did not contain any formula of the sort we conjectured to exist. If we (my partner and I) were the blind endorser of the *raison d'être* of this sort of encyclopedia and trusted the exhaustiveness of the information it contained, then we would jump to conclusion that okay, our

hypothetical formula had never been discovered by anybody else, so we are going to claim we are the first to discover it. As soon as we figure out its finalized form, let's publish it. But before long we were lucky enough to find out by ourselves that, what we were seeking was discovered by one prominent mathematician a long time ago, and that person's paper was published in a printed, legit (indeed a very prestigious), journal in 1951. In my opinion, that beautiful formula discovered by that prominent mathematician in 1951 should be there in that on-line encyclopedia. But it wasn't. By the way, when I say I am working on something that had to do with the work done in 1951, that does not mean I am not up to date. For this, I will simply point out that The Riemann Hypothesis is about 140 years old, and the status of it is it is still an open problem today (August 26th, 2014), it is considered as the most challenging and the deepest mathematical problem in today's mathematical scene.

So, my bottom line: I never discourage you from typing in keywords in Google and reading whatever shows up on your computer screen, but please be mindful the credibility of what you see on your computer screen is uncertain. Please take whatever information you can retrieve on the internet with a grain of salt.

Now, for that reason, I consciously minimize referencing to on-line sources throughout the entire course of the semester. Please do not get carried away. I am not doing it because I have an inclination toward the anachronism (or because I despise internet). I am completely up-to-date as a mathematician working in one research field. Whatever decisions I make, as to what I do and what I don't do in this class, those are conscious decisions, count that there is a sound reason behind them. Non-reference to websites is one of those things where I know what I am doing.

- **Course Materials (Departmental policy):**

Course materials prepared by the instructor, together with the content of all lectures and review sessions presented by the instructor, are the property of the instructor. Video and audio recording of lectures and review sessions without the consent of the instructor is prohibited. On rare occasions, the instructor will grant permission for students to audio tape lectures, on the condition that these audio tapes are used as a study aid by the individual making the recording. Unless

explicit permission is obtained from the instructor, recording of lectures and review sessions may not be modified and must not be transferred or transmitted to any other person, whether or not that individual is enrolled in the course.

- **Misconduct (Departmental policy):**

The scope and content of the material included in this course are defined by the instructor in consultation with the responsible academic unit. While the orderly exchange of ideas, including questions and discussions prompted by lectures, discussion sessions and laboratories, is viewed as normal part of the educational environment, the instructor has the right to limit the scope and duration of these interactions. Students who engage in disruptive behavior, including persistent refusal to observe the boundaries defined by the instructor regarding inappropriate talking, discussion, and questions in the classroom or laboratory may be subject to discipline for non-academic misconduct for disruption of teaching or academic misconduct, as defined in the Code of Student Rights and Responsibilities (CSRR), Article 22, Section C, and the University Senate Rules and Regulations, Section 2.4.6. Article 22 of CSRR also defines potential sanctions for these types of infractions.

- Below is an excerpt of the memorandum from the University Official:

SUBJECT: Academic Misconduct

Our professional lives are built on trust. When that trust is violated, we all suffer. I am writing to summarize the University Senate Rules and Regulations (USRR) that deal with academic misconduct and to ask for your assistance in dealing with academic misconduct.

USRR 2.6.1 provides the following definition of student academic misconduct: Academic misconduct by a student shall include, but not be limited to, disruption of classes; threatening an instructor or fellow student in an academic setting; giving or receiving of unauthorized aid on examinations or in the preparation of notebooks, themes, reports or other assignments; knowingly misrepresenting the source of any academic work; unauthorized changing of grades; unauthorized use of University approvals or forging of signatures; falsification of research results; plagiarizing of another's work; violation of regulations or ethical codes for the treatment of human and animal subjects; or otherwise acting dishonestly in research.