Autumn 2023: Syllabus for LinA

Prof. Jonathan L.F. King University of Florida, Gainesville FL 32611-2082, USA

For all of my courses

[Specific Linear Algebra info starts on the next page.]

Who?	Prof. King	Eddress:	squash@ufl.edu
Office:	402Little	Tel:	352-294-2314
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Math Dept: 3rd floor Little Dept.Tel: 352-294-2350

To find my office (402 Little Hall; Top floor, NE corner) just "Maximize x, y and z." (Note: I do *not* pick up tel. messages remotely, but do read email multiple times a day. It is almost always better to email me first, before telephoning my office.) Ph.D student AARON THRASHER will be assisting. Aaron's office is 475 LITTLE HALL.

Aaron's webpage

https://people.clas.ufl.edu/akolby-thrasher/

<u>Class</u> <u>attendance</u> is <u>required</u>, and is part of a student's CP, Class participation, grade.

Contacting Prof.K. If you need to get an important message to me (e.g, you'll be missing an in-class exam), it is *particularly important* that you **email me** from your **UF** eddress as soon as possible; preferably several weeks or days before the exam; several hours before, if you didn't know in advance.

I do not pick up office phone messages remotely, so it is important that you email me. If urgent, you should also tel. the math dept, **352-294-2350**, and they can contact me at home. The secretaries can also put a note in my mailbox if you request it. [All these tel.numbers are wired phones; they do not take text-messages.]

IMPORTANT: I will primarily use **email** for contacting students, *not* Canvas-mail. I ask that students read email *at least* twice a day morning/evening (excepting for religious observance).

IMPORTANT: Students will be typesetting solutions to problems and will need a real **computer**; a cellphone does <u>not</u> suffice. Also, students will need access to a **printer**, as some of the typeset assignments will need to be handed-in on paper (not electronically).

As some office-hours will be via Zoom, students will need Zoom-capability.

Prof.K's clickable links:

• Teaching Page • http://squash.1gainesville.com/teaching.html info for all my courses. Gives links to Putnam competition, Robert Long essay competition, links to the free mathematical typesetting language T_FX/IAT_FX.

The Teaching Page also has an extensive list of:

Usually Useful Pamphlets.

Our LinA Webpage:

http://squash.1gainesville.com/course.LinA.curr.html

the current semester, as well as links to previous versions (see Nostalgia) of LinA, containing previous exams and microquizzes, for your studying pleasure!

Prof. King's page at UF https://people.clas.ufl.edu/squash/ Long essay competition.

Prof.K schedule & office hours

http://squash.1gainesville.com/info.jksched.html

Math Dept. homepage

http://math.ufl.edu/ mation on applying to grad school, seminars, conferences, faculty,staff,grad listings, tutors for hire.

University resources, clickable:

- * UF syllabus policy https://people.clas.ufl.edu/squash/univ-syllabus-policy/
- * Accommodation for students with disabilities https://disability.ufl.edu/students/get-started/
- * UF Teaching Center https://academicresources.clas.ufl.edu/ both in-person and via zoom.
- * Writing Studio https://writing.ufl.edu/writing-studio/ 2215 Turlington, 352-846-1138.
- * The UF $\frac{\text{Help desk}}{\text{http://helpdesk.ufl.edu/}}$ 352-392-4357.
- * End-of-Semester student evals of professors https://gatorevals.aa.ufl.edu/students/

LOR: Letter-of-recommendation. I base LORs substantially on how a student "thinks on his/her feet"

I require **two** courses with me, at least one of which is *proof-based*, as well as the student actively participating in class. (Occasionally, one course may suffice if it is a graduate course or a Special Topics course, e.g, my MATHEMATICAL CRYPTOGRAPHY course.) Microquizzes.There will be some number of "pop"(unannounced) microquizzes (MQ), each worth 30points.(Just handing-in the MQ with name and ordinal earns 5points.)

MQs never occur on religious holidays; **email me** of all such religious dates by the first Wedn. after Add/Drop.

Usually, a pop-quiz has a single, easy question. I use them partly for attendance, and checking that an idea from the previous class caught on.

IMPORTANT: I *drop* the lowest microquiz score. AND: There is **No makeup** for the first missed MQ, regardless of reason; that is what the dropped-score is for.

If a 2^{nd} MQ is missed, I <u>may</u> give a make-up, if there was an emergency or if I knew in advance (e.g., you are giving a talk at a conference, and you let me know well in advance).

Class Archive. We will all use our LinA Archive, a LISTSERV, to communicate to the whole class.

Once Add/Drop has ended, I will email out how to postto/read-from our Archive, which plays the role of a LinA Wikipedia that students build during the semester, acting as a reference for everyone in class.

Students will be posting problem-solutions to the Archive, as part of their CP (Class Participation) grade.

Canvas. Canvas will be used for recording grades, but not much else. We will primarily use *email* and our class Archive (a LISTSERV) to communicate with each other outside of class.

End-of-Semester Games Party! If COVID *et al* stays low, then we will have an *End-of-Semester Games Party*. (We might also have a "team building" *Games Party* mid-semester.) In the past, the Games Party has been on the last date of class, at Pascal's Cafe, in the

Christian Study Center of Gainesville 112 NW 16th Street

Abbreviations. MQ, Microquiz. OH, Office-Hour. CP, Class participation. IP, Individual Project. IOP, Individual Optional Project. RLEC, Robert Long Essay Competition.

RLEC. Each year, students who like to write short essays may enter the *Robert Long Essay Competition*. The RLEC has a monetary prize and, more importantly, looks great on a CV.

Office Hours: TBD

Specific LinA information:

LinA is an introduction to Linear Algebra, with emphasis on finite-dim'al spaces.

Texts: The official text is the 5th-edition of Linear Algebra, by Friedberg, Insel, Spence, However, the 4th or 3rd edition is fine. This is a good text, well worth owning.

A picture of the cover is on our course webpage

Course Page: LinA

Course/Room. MAS4105 3247 (14608) Linear.Algebra.1 MTWF6 MAT 7 Prof. King / Aaron Thrasher

The class meets in Matherly Hall, room 7 on MTWF at 6th period, 12:50-13:40.

CP grades. Each of Sept., Oct., Nov. has a **CP**, Class participation, 45pt grade based on speaking in class, attending OHs (sometimes via Zoom), and *especially* posting solns to non-trivial problems to our Archive. A typical grade is 20. For *exceptionally* active students, I may give a grade a bit higher than 45.

MQ grades. Each microquiz is 30pts Typically, MQs are not announced. A MQ usually has a single routine question. The *lowest MQ score* is dropped; there is <u>no</u> <u>makeup</u> for the first missed MQ.

The classday following an in-class exam usually has an MQ with a slight variation of a question from the exam.

NOTE: There will be a MQ the classday before, and the classday after, Thanksgiving Break.

(continued...)

LinA Exams. Each MQ (microquiz) is 30pts; 5pts just for handing it in, with name and ordinal correct. There will be microquizzes on the classdays before and after *Thanksgiving Break*.

There is also a CP, class participation, grade for each month; a typical grade is 20pts.

There will be an end-of-semester take-home Individual Optional Project [IOP] that will be due the day after the semester's last class-day.

Exams for Autumn-semester, 2023: Each of the 3 exams is \approx 200pts.

Class U: TBD.

There will be MQs on the classdays before and after *Thanksgiving Break*.

TBD and TBD. (The dates of SB are March 5-12.)

Class V: TBD.

Class W: TBD.

Withdraw-date: TBD

There will be a microquiz on the classday after each exam-day. Occasionally, an exam needs to be moved a classday earlier or a classday later.

Last classday: Wedn., 20Apr2022.

Typeset INDIVIDUAL PROJECT (possibly optional): Due Thursday, 21Apr2022, slid completely under my office door, LIT402. I will give an *estimate* of current course-grade by the withdraw date of Frid., 08Apr2022.

Sincerely, Prof. King [LinearAlg]