# Numerical Analysis II

Math 575B

Professor: Office: Office hours:	Leonid Kunyansky Math 719 see http://www.math.arizona.edu/~leonk//teaching/2017-18/teach1718.htm Tentatively:		
	Monday: Tuesday: Friday:	<b>12:00-1:00</b> pm <b>4:00-5:00</b> pm <b>12:00-1:00</b> pm	
Phone: E-mail:	621-4509	•	
Home page: Grades (only!):	leonk@math.arizona.edu http://www.math.arizona.edu/~leonk/ Desire to Learn ( <b>D2L</b> ): https://d2l.arizona.edu/		

Class meets each Tuesday and Thursday from 11:00 am to 12:15 pm at Math 501.

### Attendance:

Students are expected to attend every scheduled class. It is the students responsibility to keep informed of any announcements, syllabus adjustments or policy changes made during classes. Students who missed three classes without an officially documented excuse most likely will be dropped from the class.

### Texts:

Analysis of Numerical Methods by E. Isaacson and H. Keller, Dover. (The electronic version of this book is available through the UofA library).

Computer Methods for Ordinary Differential Equations and Differential-Algebraic Equations, by U. Ascher and L. Petzold, SIAM.

You will need to have access to a computer with MATLAB on it. The University provides a free site license for students and faculty, available at http://softwarelicense.arizona.edu/mathworks-matlab (You would have to download MATLAB from MathWorks and install it on your computer. Then you would obtain the license from the above link which will enable you to run the software).

### **Prerequisites:**

Students are expected to have a solid background in Linear Algebra, Calculus and Ordinary Differential Equations. It is quite helpful to have some computer programming experience, especially in MATLAB.

### Tests and Homeworks:

Homework will be assigned regularly, and will usually be due on Thursday. I may choose to grade only selected problems. No late homework will be accepted. There will be a midterm test (most likely on **Thursday, March 15**), and the **final** on **Tuesday, May 8**, from 10:30 to 12:30 pm at the same room. In addition there may be one or two mini-projects that are considered a part of the homework. Homeworks will be posted at http://math.arizona.edu/~leonk/teaching/2017-18/m575b/math575b.htm

# Grading:

The midterm will be worth 100 points, and the final will count for 200 points. At the end of the semester I will scale the homework so that the maximum grade is equal 300 points. The total grade will be determined by the following table

510 to 600	85% to $100%$	Α
450 to 509	75% to $85%$	В
390 to 449	65% to $75%$	С
330 to 389	55% to $65%$	D

# Academic integrity

Students are expected to strictly adhere to the Code of Academic integrity. In particular, any use of the **solutions to the homework problems** distributed to other students by instructors who taught this course in the past is **absolutely prohibited**. If such a violation takes place, I will initiate the due procedure as described in the Code of Academic Integrity, see <a href="http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity">http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity</a>

### Students with disabilities

If you anticipate issues related to the format or requirements of this course, please meet with me to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Resources (621-3268; http://drc.arizona.edu). You should notify me of your eligibility for reasonable accommodations by **Tuesday**, **January 23**. Then we can plan how best to coordinate your accommodations.

### Students withdrawing from the course

You may withdraw from the course with a deletion from your enrollment record through **January 24** using UAccess.

You may withdraw with a grade of "W" or change to Audit through March 27.

The University allows withdraws after March 27, but only with the Dean's signature. Late withdraws are dealt with on a case by case basis, and requests for late withdraw without a valid reason may or may not be honored.

# Incompletes

The grade of I will be awarded if all of the following conditions are met:

- 1. The student has completed all but a small portion of the required work.
- 2. The student has scored at least 50%
- 3. The student has a valid reason for not completing the course on time.
- 4. The student agrees to make up the material in a short period of time.
- 5. The student asks for the incomplete before grades are due (48 hours after the final.)

# University statement on Academic Integrity and Student Code of Conduct

Students must adhere to the University policies regarding the Code of Academic Integrity, see http://deanofstudents.arizona.edu/academic-integrity/students/academic-integrity

Students at The University of Arizona are expected to conform to the Student Code of Conduct: http://deanofstudents.arizona.edu/accountability/students/student-accountability

The UA Threatening Behavior by Students Policy prohibits threats of physical harm to any member of the University community, including to oneself. See <a href="http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students">http://policy.arizona.edu/education-and-student-affairs/threatening-behavior-students</a>

The University is committed to creating and maintaining an environment free of discrimination; see http://policy.arizona.edu/human-resources/nondiscrimination-and-anti-harassment-policy

# Additional Resources for Students

Office of Diversity http://diversity.arizona.edu/

Counseling and psychological Services: http://www.health.arizona.edu/counseling-and-psych-services

Oasis: https://www.health.arizona.edu/oasis-sexual-assault-and-trauma-services

## University and pronoun name policy

Instructors and students will use names and pronouns as requested, and instructors will update their rosters to accommodate students who modify their names and/or pronouns after course registration. Instructors will make specific reference to the name and pronoun usage statement in the syllabus on the first day of class and model correct name and pronoun usage in the classroom.

This syllabus is tentative and can be changed at any time at the instructor's discretion.