MAT 710-1001 COMPLEX FUNCTIONS THEORY II
(APPLIED COMPLEX ANALYSIS)
SPRING SEMESTER 2016 (January 19 - May 7, 2016)

Instructor: Dr. A. Muleshkov, Associate Professor of Mathematics

Location: CBC-C210 Time: Mo We 1:00 – 2:15 P. M.

Office: CDC-1020 Office Phone: 895-0387 (Voice mail is available.)
Office Hours: Monday and Wednesday 12:00 - 12:55 P. M.
Tuesday and Thursday 4:00 - 4:55 P. M.

E-mail address: muleshko@unlv.nevada.edu
Web site: http://faculty.unlv.nevada.edu/muleshko/

Reading Materials:

Learning Outcomes: Theory and various applications of advanced conformal mapping, including finding exact solutions of complicated Dirichlet and Neumann problems for the Laplace PDE, as well as problems with unknown portions of the boundary. Theory and various applications of elliptic integrals, elliptic functions, and other special functions, including in Physics, Engineering, Geometry, Differential Equations, Number Theory, etc.

Prerequisite: MAT 709 (min. grade B-)

Grade: The final grade for the course is obtained from (max. 500) the following:

- home work - 150 points
- midterm test - 100 points
- final exam - 200 points
- instructor's discretion - 50 points
Students who want to discuss mathematics with the instructor are encouraged to come to the office hours. Please do not use e-mail for that purpose!

In this class, the books are only tools rather than self-study texts. Sometimes, easier and more powerful methods are going to be presented in class. These books were chosen by the instructor because of the good choice and order of topics and also because of the quality and relevance of the problems.

The knowledge of undergraduate Complex Analysis and MAT 709 is the prerequisite for this class. Even if some review will be done in class, students should have their undergraduate texts/class notes from my MATH 459/MAT 659 and MAT 709 courses and do extensive review on their own. Accordingly, students should plan to allow sufficient time. Regular attendance, prompt arrival, and taking elaborate class notes are strongly recommended; students who do not maintain these good habits do not usually succeed in this course. Knowledge of a phone number of and keeping in touch with a classmate could be very helpful.

Please keep this syllabus for future reference. If you have any questions about the issues raised here or other issues, please come to my office hours.

**Academic Misconduct** – Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV’s function as an educational institution.

An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the *Student Academic Misconduct Policy* (approved December 9, 2005) located at: [http://studentconduct.unlv.edu/misconduct/policy.html](http://studentconduct.unlv.edu/misconduct/policy.html).

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**Disability Resource Center (DRC)** – The UNLV Disability Resource Center (SSC-A 143,
http://drc.unlv.edu/, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you.

If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

**Religious Holidays Policy** – Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor no later than the end of the first two weeks of classes, January 29, 2016, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: http://catalog.unlv.edu/content.php?catoid=6&navoid=531.

**Incomplete Grades** - The grade of I – Incomplete – can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student’s control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving “I” grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

**Tutoring** – The Academic Success Center (ASC) provides tutoring and academic assistance for all UNLV students taking UNLV courses. Students are encouraged to stop by the ASC to learn more about subjects offered, tutoring times and other academic resources. The ASC is located across from the Student Services Complex (SSC). Students may learn more about tutoring services by calling 702-895-3177 or visiting the tutoring web site at: http://academicsuccess.unlv.edu/tutoring/.

**UNLV Writing Center** – One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student’s Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: http://writingcenter.unlv.edu/
Rebelmail – By policy, faculty and staff should e-mail students’ Rebelmail accounts only. Rebelmail is UNLV’s official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university. Students’ e-mail prefixes are listed on class rosters. The suffix is always @unlv.nevada.edu. Emailing within WebCampus is acceptable.

Final Examinations – The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: http://www.unlv.edu/registrar/calendars.