

**FIM 590-001 Credit Risk and CECL  
Spring 2019**

1. **Instructor:** Tao Pang  
**Office:** 4116 SAS Hall  
**Office Hours:** TBA  
**Phone Number:** (919) 513-2110  
**E-mail address:** [tpang@ncsu.edu](mailto:tpang@ncsu.edu)

Guest Lecturers from Industry will be invited to give lectures in class.

2. **Class Meeting Place and Times:** Arranged.
3. **Course Description:** This is an advanced graduate financial mathematics and accounting course introducing credit modeling and expected loss theory and practice. The emphasis will be solution techniques of classical problems in these topic areas as a bridge to further work.
4. **Course Prerequisites:** An understanding of multiple linear regression, principles of accounting including allowance accounting, and understanding of financial institutions and banking is recommended but not required.
5. **Textbook:** TBD
6. **Course Objectives:** The purpose the course is to ensure students achieve proficiency in credit risk modeling and allowance calculation for financial securities. Further, the successful student will obtain an understanding of the requirements of current regulatory requirements, particularly Current Expectation of Credit Loss (CECL).

Students will understand how to perform vintage analysis; roll rate methods; loss rate methods; probability of default, loss given default, and exposure at default; transition matrix approaches; and discounted cash flow analysis.

Students will further learn to find and examine financial statements of banks and related financial institutions.

As a result of this class, students should be able to:

- 1) Articulate and demonstrate the effects of allowance changes on banking activity;

- 2) Calculate expected credit losses using different methods;
  - 3) Identify methods appropriate to different types of credit transactions;
  - 4) Fluent understanding of ASU-2016-13 and regulations related to CECL.
7. **Determination of Grades:** Homework: 20%, Projects: 50%, Tests: 30%.
8. **Academic Integrity Statement:** Students are expected to follow university guidelines available at [http://www.ncsu.edu/provost/academic\\_regulations/integrity/reg.htm](http://www.ncsu.edu/provost/academic_regulations/integrity/reg.htm)
9. **Accommodations for Disabilities:** Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with the Disability Services Office at Suite 2221, Student Health Center, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see the Academic Accommodations for Students with Disabilities Regulation (REG02.20.01) (<https://policies.ncsu.edu/regulation/reg-02-20-01/>).