# FIM 500 Course Syllabus

## FIM 500 – Career Development of Quants

**Section 1**

**FALL 2017**

**3 Credit Hours**

### Course Description

Learn how to enhance your professional and career development skills while you are in the Financial Math program with seminar topics on networking, LinkedIn, resumes, interviews, presentations and business writing tips. You will also gain resources and important industry information from guest speakers and alumni. Become Base SAS Certified and Bloomberg Certified, and gain hands-on experience with these tools by participating in group and individual projects.Course includes one or more projects that expose students to applications in the area of financial mathematics.  Projects utilize current data sources, such as the Bloomberg Terminal, and software used in quantitative finance, such as SAS. Students that wish to develop SAS programming skills are encouraged to take ST 555/556.

### Learning Outcomes

Goal A: Develop professional skills that focus on the workplace of a quantitative analyst.

Associated outcomes

1. Create a professional presence in social media (e.g. Linkedin)
2. Write a resume that articulates job skills and relevant projects
3. Create cover letters customized to the job and company
4. Network effectively with peers and practitioners.
5. Create 30 second pitch to begin their networking practice.
6. Participate in mock interviews to develop techniques for a successful interview.

Goal B: Learn technical skills needed by a quantitative analyst that are not taught in the academic core of the MFM program.

Associated outcomes

1. Extract data from industry-standard sources, such as a Bloomberg Terminal.
2. Vertical and horizontally merge multiple datasets
3. Create reports on the SAS metadata
4. Run statistical analysis on datasets (mean, variance, skew, kertosis)
5. Impute missing data.
6. Create a decision model from data.

### Course Structure

There will be a combination of lectures on professional skills, discussions of the project, workshops from practitioners.  Professional skills are deveoped via practice.  This includes presentations on topics in financial math/engineering as well as practice networking and interviews. BMC Certificate of Completion and Base SAS Certification are developed primarily through self-study.

### Course Policies

Students are expected to treat this as a professional meeting.  No eating or drinking, dress is business casual, use of computers and personal devices should be limited.

### Instructors

**Tao Pang** - *Instructor*  
**Email:** [tpang@ncsu.edu](mailto:tpang@ncsu.edu)   
**Phone:** 919-513-2110  
**Office Location:** SAS 4146  
**Office Hours:** T, Th 10:00am-11:30am

**Jason Zyai** - *Instructor*  
**Email:**   
**Phone:**   
**Office Hours:** TBD

**Erica Isabella** - *Instructor*  
**Email:**   
**Phone:**   
**Office Hours:** TBD

### Course Meetings

#### Lecture

**Days:** F   
**Time:** 1:30pm - 4:15pm   
**Campus:** Main   
**Location:** Rm 2225, SAS Hall   
*This meeting is required.*

### Course Materials

#### Textbooks

**Heard on the Street** - *Crack*   
**Edition:** 15th   
**ISBN:** 0994103867   
**Cost:** 38.23   
*This textbook is required.*

#### Expenses

**SAS Certification Exam** - $90  
*This expense is required.*

#### Materials

None.

### Requisites and Restrictions

#### Prerequisites

None.

#### Co-requisites

None.

#### Restrictions

Must be in the Masters of Financial Mathematics program.

### General Education Program (GEP) Information

#### GEP Category

This course does not fulfill a General Education Program category.

#### GEP Co-requisites

This course does not fulfill a General Education Program co-requisite.

### Transportation

This course will not require students to provide their own transportation. Non-scheduled class time for field trips or out-of-class activities is NOT required for this class.

### Safety & Risk Assumptions

None.

### Grading

#### Grade Components

| **Component** | **Weight** | **Details** |
| --- | --- | --- |
| **SAS Assignments and Quizzes** | **10** | Homework and Quizzes checking progress towards the certification exam |
| **SAS Certified Base Programmer for SAS 9 Credential** | **10** | Provide the credential that shows passing the base level SAS certification exam. |
| **Project** | **10** |  |
| **Bloomberg Certification** | **10** | Provide the certificate of completion for Bloomberg Market Training (screen BMT) |
| **Professional Speaking** | **20** | Elevator Speech, networking events, presentations to peers and to supervisors.  Students that need extra practice for oral presentations will be required to participate in a specially designed workshop. |
| **Interview Practice** | **10** | Mock interviews (minimum of 2) |
| **Networking** | **10** | Career fairs, professional events (minimum of 2) |
| **Study Group Participation** | **10** | Participate actively in study group meetings. You will meet at least once a week. |
| **Resume & Professional Writing** | **10** | Resumes, cover letters, writing for professional communication including Linkedin Profile. |

#### Letter Grades

**This Course uses Standard NCSU Letter Grading:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 97 | ≤ | **A+** | ≤ | 100 |
| 93 | ≤ | **A** | < | 97 |
| 90 | ≤ | **A-** | < | 93 |
| 87 | ≤ | **B+** | < | 90 |
| 83 | ≤ | **B** | < | 87 |
| 80 | ≤ | **B-** | < | 83 |
| 77 | ≤ | **C+** | < | 80 |
| 73 | ≤ | **C** | < | 77 |
| 70 | ≤ | **C-** | < | 73 |
| 67 | ≤ | **D+** | < | 70 |
| 63 | ≤ | **D** | < | 67 |
| 60 | ≤ | **D-** | < | 63 |
| 0 | ≤ | **F** | < | 60 |

#### Requirements for Credit-Only (S/U) Grading

This course cannot be taken for S/U grading.  It must be taken for a letter grade.

#### Requirements for Auditors (AU)

Information about and requirements for auditing a course can be found at <http://policies.ncsu.edu/regulation/reg-02-20-04>.

This course cannot be taken as an Audit

#### Policies on Incomplete Grades

If an extended deadline is not authorized by the Graduate School, an unfinished incomplete grade will automatically change to an F after either (a) the end of the next regular semester in which the student is enrolled (not including summer sessions), or (b) by the end of 12 months if the student is not enrolled, whichever is shorter. Incompletes that change to F will count as an attempted course on transcripts. The burden of fulfilling an incomplete grade is the responsibility of the student. The university policy on incomplete grades is located at <http://policies.ncsu.edu/regulation/reg-02-50-03>. Additional information relative to incomplete grades for graduate students can be found in the Graduate Administrative Handbook in Section 3.18.F at <http://www.fis.ncsu.edu/grad_publicns/handbook/>

#### Late Assignments

Projects: No late assignments are accepted.  If a graded assignment is missed due to an excused absence, the average of the remaining grades will be used in placed of the missing grade.

### Attendance Policy

For complete attendance and excused absence policies, please see <http://policies.ncsu.edu/regulation/reg-02-20-03>

#### Attendance Policy

Attendance is required.

#### Absences Policy

1. One unexcused absence is allowed.
2. Each additional absence will result in a penalty of 25% of a letter grade.  This means 4 unexecused absences beyond the one permitted will result in a full letter grade penalty.
3. Arriving at class late will be counted as an absence.

#### Makeup Work Policy

Projects: no makeup work is permitted.

#### Additional Excuses Policy

None.

### Academic Integrity

#### Academic Integrity

Students are required to comply with the university policy on academic integrity found in the Code of Student Conduct found at <http://policies.ncsu.edu/policy/pol-11-35-01>

Some assignments will prohibit sharing information and/or prohibit group work.  The first violation will result in a zero for the assignment.  The second violation will result in suspension from NCSU and an F in the class.  All violations will be reported to the Office of Student Conduct.

#### Academic Honesty

See <http://policies.ncsu.edu/policy/pol-11-35-01> for a detailed explanation of academic honesty.

#### Honor Pledge

Turning in any test or assignment indicates "I have neither given nor received unauthorized aid on this test or assignment."

### Electronically-Hosted Course Components

Students may be required to disclose personally identifiable information to other students in the course, via electronic tools like email or web-postings, where relevant to the course. Examples include online discussions of class topics, and posting of student coursework. All students are expected to respect the privacy of each other by not sharing or using such information outside the course.

**Electronically-hosted Components:** Grades, reading materials, and other items will be shared via Moodle.

### Accommodations for Disabilities

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, student must register with the Disability Services Office (<http://www.ncsu.edu/dso>), 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 at [http://policies.ncsu.edu/regulation/reg-02-20-01.](http://policies.ncsu.edu/regulation/reg-02-20-01)

### Non-Discrimination Policy

NC State University provides equality of opportunity in education and employment for all students and employees. Accordingly, NC State affirms its commitment to maintain a work environment for all employees and an academic environment for all students that is free from all forms of discrimination. Discrimination based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation is a violation of state and federal law and/or NC State University policy and will not be tolerated. Harassment of any person (either in the form of quid pro quo or creation of a hostile environment) based on race, color, religion, creed, sex, national origin, age, disability, veteran status, or sexual orientation also is a violation of state and federal law and/or NC State University policy and will not be tolerated. Retaliation against any person who complains about discrimination is also prohibited. NC State's policies and regulations covering discrimination, harassment, and retaliation may be accessed at <http://policies.ncsu.edu/policy/pol-04-25-05> or [http://www.ncsu.edu/equal\_op/.](http://www.ncsu.edu/equal_op/) Any person who feels that he or she has been the subject of prohibited discrimination, harassment, or retaliation should contact the Office for Equal Opportunity (OEO) at 919-515-3148.

## Course Schedule

**NOTE:** The course schedule is subject to change.

### Lecture F 1:30pm - 4:15pm — Schedule will be in the course website — 08/18/2017- 12/1/2017

Visit the course website for schedule of events