### Course Overview

**Instructor Name:** Dr. Yongpeng Zhang  
**Office Location:** SR Collins, Rm 311  
**Office Phone:** 936-261-9869  
**Fax:** 936-261-9867  
**Email Address:** ypzhang@pvamu.edu

**Snail Mail (U.S. Postal Service) Address:** Prairie View A&M University  
**P.O. Box** 519  
**Mail Stop** 2530  
**Prairie View, TX 77446**  
**Office Hours:** MWF 9:00 – 12:00, 1:00 – 2:00, and walk-in is welcomed  
**Virtual Office Hours:**  
**Course Location:** SR Collins, Rm 331  
**Class Meeting Days & Times:** R 6:00 – 8:50  
**Course Abbreviation and Number:** GNEG 5193

**Catalog Description:** Credit 3 semester hours. H-2 and H-infinite space; internal stability; u-synthesis; algebraic Riccati equation; H-2 optimal control; H-infinite control.

**Recommended Text:** Essential of Robust Control, by Kemin Zhou, published by Prentice-Hall, ISBN: 9780135258330

**Access to Learning Resources:**  
PVAMU Library:  
- phone: (936) 261-1500;  
- web: [http://www.tamu.edu/pvamu/library/](http://www.tamu.edu/pvamu/library/)

University Bookstore:  
- phone: (936) 261-1990;  
- web: [https://www.bkstr.com/Home/10001-10734-1?demoKey=d](https://www.bkstr.com/Home/10001-10734-1?demoKey=d)

**Course Goals or Overview:**  
The goal of this course is to  
(a) Provide an introduction to Robustness;  
(b) Robust Analysis;  
(c) Utilize H-2 and H-inf method to conduct controller design.

**Course Evaluation Methods**  
This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course. Note: See Program Outcomes in True Outcomes  
- Exams – written tests designed to measure knowledge of presented course material  
- Exercises – written assignments designed to supplement and reinforce course material  
- Projects – web development assignments designed to measure ability to apply presented course material  
- Class Participation – daily attendance and participation in class discussions
Grading Matrix

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assignment</td>
<td>20</td>
</tr>
<tr>
<td>Research Project</td>
<td>10</td>
</tr>
<tr>
<td>Mid Term Exam</td>
<td>30</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Grade Determination:
A = 90 – 100pts; B = 80 – 89pts; C = 70 – 79pts; D = 60 – 69pts; F = 59pts or below

Course Procedures

Submission of Assignments:
Assignment and research report need to be submitted online with true outcome.

Formatting Documents:
Microsoft Word is the standard word processing tool used at PVAMU. If you’re using other word processors, be sure to use the “save as” tool and save the document in either the Microsoft Word, Rich-Text, or plain text format.

Exam Policy
Exams should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook).

University Rules and Procedures
Disability statement (See Student Handbook):
Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

Academic misconduct (See Student Handbook):
You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

Forms of academic dishonesty:
1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. Fabrication: use of invented information or falsified research.
4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else’s words, ideas, or data as one’s own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one’s own work also constitutes plagiarism.

Nonacademic misconduct (See Student Handbook)
The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor’s ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated.
An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

Sexual misconduct (See Student Handbook):
Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

Attendance Policy:
Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student’s course grade being reduced or in assignment of a grade of “F”. Absences are accumulated beginning with the first day of class.

Student Academic Appeals Process
Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor’s assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.