Dr. Chaman L Sabharwal

318 Computer Science Building
Phone: (573) 341-6353
Fax: (573) 341-4501
Email: chaman@mst.edu
URL : http://www.mst.edu/~chaman

Office Hours TU,TH: 6:30-8:00AM, 12:30-3:30pm,
By appointment (unless some meeting) other times
(feel free to stop by any time I am in the office)

Handouts, Assignments, Examinations are on Canvas
http://Canvas.mst.edu/

Read the book for details on lectures, handouts will serve as a guide for the lectures. The class Lectures will be supplemented with information not in the book and handouts.

Exams:

Exam1:	**15%**	**February 12, 2019**
Exam2:	**15%**	**March 12, 2019**
Exam3:	**15%**	**April 11, 2019**
Exam4:	**15%**	**May 07, 2019**
HW/Quizzes	**40%**	**(Each HW/Quiz 10 points)**

Criteria for Grading

A: [86-100]% B: [76-85]% C: [66-75]% D: [51-65]% F:[0-50]

- Attendance Required, Roll call will be taken. Attendance is mandatory. Absence from class beyond three lectures is not permitted. Unless there is a university acceptable proof, documented emergency and is reported immediately, the registrar will drop you from the class on 4th absence on grounds of excessive abscence.
- Homework is essential for your comprehension and to do good on the exams. Expect Homework assignment every week. Scheduled Homework will be posted on the Canvas. Homework is graded and grades posted on canvas.
- No late submitted work will be graded in order to grade everyone uniformly on homework,
- No Makeup quiz/homework/exams will be given unless the student contacts the instructor before the quiz/homework/exam, and has MS&T-acceptable documented reason (i.e. illness, death in the family, etc).
- Assignment/Examination/Homework grades will be recorded on my excel as soon as they are graded. Any discrepancies on feedback must be reported and resolved within *one week* of assignment grade announcement. *No correction* will be made after one week. The corrections will not be reflected on canvas. My excel will be updated for discrepancies. All scores count towards the final grade.
- The programs will be graded for accuracy, efficiency, originality, Graphical User Interface, Programming Language as used and specified in the class. Programming language for this course is Matlab.
- For each homework, turn in hard copy at the beginning of the class to mark it as feedback.
- For each programming assignment, post the code on Canvas and turn in program & its output hard copy in the class for feedback.

- Your Home works/ exams will be kept in the dept for ABET purposes.

- **Academic Alert System:** http://academicalert.mst.edu

All faculty are encouraged to utilize the online Academic Alert System. The purpose of the Academic Alert System is to improve the overall academic success of students by improving communication among students, instructors and advisors; reducing the time required for students to be informed of their academic status; and informing students of actions necessary by them in order to meet the academic requirements in their courses.

- **Academic Dishonesty:** http://registrar.mst.edu/academicregs/index.html Page 30 of the Student Academic Regulations handbook describes the student standard of conduct relative to the System's Collected Rules and Regulations section 200.010, and offers

descriptions of academic dishonesty including cheating, plagiarism or sabotage. Additional guidance for faculty, including the University's Academic Dishonesty Procedures, is available on-line at http://ugs.mst.edu .

• **Classroom Egress Maps:**
Faculty should explain where the classroom emergency exits are located. Please include a statement in your course syllabus asking the students to familiarize themselves with the classroom egress maps posted on-line at: http://registrar.mst.edu/links/egress.html.

• **Disability Support Services:** http://dss.mst.edu
Any student inquiring about academic accommodations because of a disability should be referred to Disability Support Services so that appropriate and reasonable accommodative services can be determined and recommended. Disability Support Services is located in 204 Norwood Hall. Their phone number is 341-4211 and their email is dss@mst.edu. Instructors may consider including the following statement on their course syllabus as a means of informing students about the services offered:

"If you have a documented disability and anticipate needing accommodations in this course, you are strongly encouraged to meet with me early in the semester. You will need to request that the Disability Services staff send a letter to me verifying your disability and specifying the accommodation you will need before I can arrange your accommodation."

• **LEAD Learning Assistance** http://lead.mst.edu
The Learning Enhancement Across Disciplines Program (LEAD) sponsors free learning assistance in a wide range of courses for students who wish to increase their understanding, improve their skills, and validate their mastery of concepts and content in order to achieve their full potential. LEAD assistance starts no later than the third week of classes. Check out the online schedule at http://lead.mst.edu/assist, using zoom buttons to enlarge the view. Look to see what courses you are taking have collaborative LEAD learning centers (bottom half of schedule) and/or Individualized LEAD tutoring (top half of the schedule). For more information, contact the LEAD office at 341-7276 or email lead@mst.edu.

If you have any questions about the information listed above, please contact the Office of Undergraduate
Studies at 573-341-7276.

Computer Graphics I

(Requires Matrices from CS3200, and Programming from CS1972)

Objective:

This course emphasizes Graphics
Applications, Theory, 2D, 3D Visualization.

1. Geometrical Transformations
2. Parallel and Perspective Projections, Camera specifications
3. Rasterization and Ray casting
4. Clipping, Visibility determination
5. Meshes

Students learn interactive graphics and event driven programming using Matlab.

Tentatively Selected sections from Chapters 7, 8, 9, 10,11,12,13,15,36.5,37.2

Text Book:

Computer Graphics: principle and Practice, 3rd edition by John F. Hughes, AndriesVan Dam,Morgan McGuire, David F. Sklar, James D. Foley, Steven K. Feiner, Kurt Akler, Addison Wesley, 2014