

# Syllabus Template

## Subject 5313 — Course Title

**Instructor name: R. Panneer Selvam**

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You can call me to my office number and if I am not there please send an email with a number to contact you. I will either email you or contact you by phone. I can use skype whenever it is necessary to see and talk.

**Course Description:**

Energy and digital computer techniques of structural analysis as applied to conventional forms, space trusses, and frames. Prerequisite: CVEG 3304 with a grade of C or better.

**Required Textbook:**

Include ISBN

W. Weaver, Jr. & J.M. Gere, **Matrix Analysis of Framed Structures**, Third Edition, Van Nostrand Reinhold, NY, 1990.

Note: The new versions are very expensive. This version is fine.

**Course Goals/Objectives:**

Learn to be proficient in the following topics:

1. Static and kinematic indeterminacy of structures
2. Stiffness method of analysis of beams, 2D & 3D trusses and frames
3. Solution of simultaneous equations
4. Bandwidth calculation and banded solution
5. Analysis of beams, frames and trusses using computer programs

**Course Requirements:**

**Assignments:** Assignments for each week would be due by midnight every Sunday

**Projects:** No projects for this class

**Exams:** Three in class exam and one final exam will be given for this class. The exams will be part in class and part take home. The in class exams need to be proctored.

**Presentations:** None

**Evaluation Procedures:**

In-class exams 3 @ 100 ea.	= 300
Final Exam	= 200
Assignments	= 200
Total	<hr style="width: 100px; margin-left: auto; margin-right: 0;"/> = 700

**A 90%+, B 80 to 89%, C 70 to 79%, D 60 to 69%, F 59 or less**

**Academic Honesty Policy:**

- The University of Arkansas strives to be a center of academic excellence. As part of our Statement of Ethics, the University strives to preserve academic honor and integrity by repudiating all forms of

academic and intellectual dishonesty, including cheating, plagiarism and all other forms of academic dishonesty. Academic dishonesty is unacceptable and is subject to a disciplinary response.

- Students who are caught cheating or committing plagiarism may be given a failing grade in the course by the professor and may be subject to dismissal or further discipline.
- Plagiarism is often misunderstood as referring only to passing off another's writing as one's own. The definition also extends to ideas and arguments taken from others' work without proper citing of the original source. It is also not permissible to construct papers or reports by merely "cutting and pasting" and then just citing another's work. In writing for homework or projects, you should read and learn, process information through your mind, relate ideas, and then express your take on the material you've read **in your own words**. Cite the references where you found your information. If you do use someone else's words, do so sparingly, use quotation marks, **and** cite.

The complete Academic Integrity Policy is available at the Provost and Vice Chancellor for Academic Affairs web site, <http://provost.uark.edu>.

**Inclement Weather Policy:**

Not applicable.

**Class Procedures**

The students can contact me through my email, office phone and skype. For skype if the students arrange a time to talk to me by email or phone. Then only I can keep the skype active.

In case of late assignments or taking the exam they need to work with me for extension or alternate dates. Unless previous permission is not worked out, late assignment will not be considered for grade. The extensions are based on individual situations.

Schedule:

Course Units/Calendar Table

<b>Week</b>	<b>Chapters &amp; Lectures Covered</b>	<b>Assignments, projects, papers, quizzes and exams</b>	<b>Due by Date (All homework assignments are due each Sunday, 11:55 PM CST)</b>
<b>1 8/22 to 8/27</b>	Chapters 1.1 to 1.14, App. D  Lectures 1, 2, 3,4,5	<ul style="list-style-type: none"> <li>• Assignment #1:1.4-2 &amp;5; 1.7-5,8,11,17; 1.10-2,4,7, Cholesky Hand out</li> <li>• Read text</li> </ul>	HW#1-Due 8/28
<b>2 8/29 to 9/3</b>	Chapters: Appe. D , 3.1 to 3.2 Lectures: 6,7,8,9	<ul style="list-style-type: none"> <li>• Assignment # 2: GS Hand out , 3.3.3</li> <li>• Read text Exam #1</li> </ul>	HW#2-Due 9/4 Exam#1-Take it 9/6 or before?
<b>3 9/5 to 9/10</b>	Chapters: 3.3 to 3.4, 4.1-4.3  Lectures: 10,11,12,13,14	<ul style="list-style-type: none"> <li>• Assignment # 3: 3.3-6,18,32 &amp; 3.4.1</li> <li>• Read text</li> </ul>	HW#3-Due 9/11
<b>4 9/12 to 9/17</b>	Chapters: 4.4 to 4.15, 5.3 to 5.7  Lectures: 15,16,17,18,19	<ul style="list-style-type: none"> <li>• Assignment #4: 4.9-3, 4.12-5, CP &amp; PT program</li> <li>• Read text</li> </ul>	HW#4-Due 9/18
<b>5 9/19 to 9/24</b>	Chapters: 5  Lectures: 20,21,22,23	<ul style="list-style-type: none"> <li>• Read each chapter</li> <li>• Read text</li> <li>• Exam #2</li> </ul>	Exam#2-Take it this week-say 9/24 or before
<b>6 9/26 to 10/1</b>	Chapters: 4.16-4.25 , 5.8 to 5.11  Lectures: 24,25,26,27,28	<ul style="list-style-type: none"> <li>• Assignment #5: PF, SF program, 4.18-7, 4.24.1</li> <li>• Read text &amp; Watch corresponding lectures</li> </ul>	HW#5-Due 10/2
<b>7 10/3 to 10/8</b>	Chapters : 6, SAP 2000  Lectures:29,30,31,32	<ul style="list-style-type: none"> <li>• Read each chapter</li> <li>• Watch corresponding lectures</li> <li>• Exam #3</li> </ul>	Exam#3-Take it before 10/10
<b>8 10/10 to 10/11</b>	Chapters: Visual analysis  Lectures:33,34,35,36,37	<ul style="list-style-type: none"> <li>• Read each chapter</li> <li>• Watch corresponding lectures</li> <li>• Final Exam</li> </ul>	Final exam this week

Caveat: changes to syllabus

“The above schedule and procedures in this course are subject to change in the event of extenuating circumstances.”