

Purdue University
School of Nuclear Engineering
NUCL 351 – Nuclear Thermal Hydraulics II

Instructor: Prof. Rusi Taleyarkhan
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TA: None

Grader: Jacob Minnette, 812-746-0296; Email: jminnett@purdue.edu

Schedule: Lectures (M-W-F; 10:30am to 11:20am; GRIS 103)
Office Hours – Wednesday (4:30pm to 5:30pm)-Tent.

Prerequisites: NUCL350 or permission from instructor

Course Description: *“Emphasis is given to: Transport of Heat Energy in Nuclear Plant related Systems; Conduction/Convection/Boiling/Condensation/Radiation Heat Transfer Modes; Two-Phase Flow and Convective Boiling. Radiative Heat Transfer; Applications to Safety Analysis and Reactor Design.”*

Texts (Optional)/Handouts: by: 1) Rohsenow et al., 2) Lahey et al; 3) N.Todreas et al., 4) Incropera et al; 5) Collier et al., 6) Lamarsh and Barratta– 7)Handouts-R.Taleyarkhan See Course Syllabus /Topics List for Details (provided separately by Instructor).

Grading: The course grade will be based on homework, quizzes, exams and Project assignment; per breakdown as follows:

Homework/Quizzes:	25%
Mid-Term Exam:	25%
Final Exam:	35%
Project:	15%
A+,A-:	85+; 81-85
B+,B, B-:	77-80; 74-76; 71-73
C+,C,C-:	67-70; 64-66; 61-63
D, E, F, I	as warranted
Class participation:	5% (instructor discretionary)

Notes: Exams will cover material mainly from the in-class lectures, homeworks /handouts/quizzes. Project work will include your team presentations in class. You are responsible for all material covered in the lectures. **The best way to earn a high grade for this course is to attend lectures, take good notes, do your homework/quizzes and communicate in timely manner (esp. for clarifying course grade issues) and the Professor (for concepts covered in class and to resolve situations with grades. Purdue’s student honor code (“As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together – we are Purdue”) will be enforced. Academic dishonesty will: minimally result in a “F or zero” grade in that assignment/exam and at the instructor’s discretion may result in a failing course grade; reporting to Dean of Students.**

**** In case of a major campus emergency (see Emergency Preparedness Syllabus Attachment), course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances. You will be informed promptly via email or text alerts. Purdue’s home-page for updates on emergencies, & emergency preparedness (shelter in place; fire-evacuation). In case of sickness or university-excused absence submit a physician’s certificate or a letter from the Dean of Students, or obtain prior approval from the instructor. ****