

**NORTH CAROLINA STATE UNIVERSITY
EDWARD P. FITTS DEPARTMENT OF INDUSTRIAL AND SYSTEMS ENGINEERING**

**ISE/OR501-651 INTRODUCTION TO OPERATIONS RESEARCH
SUMMER 2026**

Weekly Course Schedule

INSTRUCTOR: S. SEBNEM AHISKA KING

SUMMER SESSION 1 – Wed, May 20 to Fri, July 31, FINAL EXAM WINDOW: Mon, Aug 3 to Tue, Aug 4

Important dates

- Wed, May 20, First day of classes
- Fri, May 22, Census date/Official enrollment date
- Mon, May 25, Memorial Day (University is closed, No classes)
- **Exam 1 window: Tue, June 23-Wed, June 24**
- Fri, June 19, Juneteenth observed (No classes)
- Thu, June 25, No classes for 10-week courses
- Fri, June 26, No classes for 10-week courses
- Fri, July 3, Independence Day observed (University is closed, No classes)
- Sun, July 5, Drop/Revision deadline
- **Exam 2 window: Thu, July 16-Fri, July 17**
- Fri, July 31, Last day of classes
- **Exam 3 (Final exam) window: Mon, Aug 3-Tue, Aug 4**

The following table includes detailed information regarding the lecture recordings to watch each week, the topics covered, the HW/project assignments and their deadlines, and exam windows.

Week	Lecture Recordings to watch	Topics	HW/Project Assignments	Exam Dates
1. May 20-22	Lecture 1: 01/13/26 Lecture 2: 01/15/26 Lecture 3: 01/20/26	Course Overview Introduction to Model Building (LINDO, EXCEL SOLVER)	HW1 due Sun, May 24	

2. May 25-29	(May 25 no class) Lecture 4: 01/22/26 Lecture 5: 01/27/26 Lecture 6: 01/29/26	Introduction to Model Building (GAMS) Linear Programming (Non-Linear to Linear Conversion- Minimax and Maximin type objective function)	HW2 due Sun, May 31	
3. June 1-5	Lecture 7: 02/03/26 Lecture 8: 02/05/26 Lecture 9: 02/10/26	Linear Programming (Non-Linear to Linear Conversion- absolute value terms, Soft Constraints, Graphical Solution, LP properties) LP Application: Aggregate planning problem (LP-Excel Solver) Exam 1 announcement (in L9)	HW3 due Sun, June 7	
4. June 8-12	Lecture 10: 02/12/26 Lecture 11: 02/19/26 Lecture 12: 02/24/26	LP Application: Aggregate planning problem (Numerical experimentation) Project overview (in L10) Linear Programming (Simplex algorithm)	HW4 due Sun, June 14 Project posted: Proposal due Sun, July 5 Report due Fri, Jul 31	
5. June 15-19	(June 19 no class) Lecture 13: 03/03/26 Lecture 14: 03/05/26	Linear Programming (Simplex, Two-Phase algorithm) Revised simplex algorithm- Introduction	HW5 due Sat, June 20	
6. June 22-26	Exam 1: June 23-24 (June 25-26 no class) No lecture to watch		HW6 due Sun, June 28	Exam 1 Exam window: June 23-24 Based on: Lectures 1-10, HW1-5
7. June 29-July 3	Lecture 15: 03/10/26 Lecture 16: 03/12/26 (July 3 no class)	Linear Programming (Revised Simplex algorithm-Steps- Numerical Example) Exam 2 announcement in L16	HW7 and Project Proposal due Sun, July 5	

8. July 6-10	Lecture 17: 03/24/26 Lecture 18: 03/26/26 Lecture 19: 04/02/26	Network Models (Shortest Path problem, Max flow problem, Project scheduling)	HW8 due Sun, July 12	
9. July 13-17	Lecture 20: 04/07/26 Exam 2: July 16-17	Network Models (Project Scheduling-Cont.)	HW9 due Sun, July 19	Exam 2 Exam window: July 16-17 Based on: Lectures 10-16, HW6-8
10. July 20-24	Lecture 21: 04/09/26 Lecture 22: 04/14/26 Lecture 23: 04/16/26	Network Models (Project Scheduling-Cont, Minimum Cost Network Flow, Minimum Spanning Tree) Integer programming model building (Knapsack, Fixed-charge problem)	HW10 due Sun, July 26	
11. July 27-31	Lecture 24: 04/21/26 Lecture 25: 04/23/26 Lecture 26: 04/28/26	Integer Programming (Set Covering, Either-Or constraints) Final exam announcement in L25 L26-Branch and bound algorithm is not covered in the final exam.	HW11 and Project report due Fri, July 31	
12. Aug 3-4	Exam 3 (Final exam): Aug 3-4			Exam 3-Final exam Exam window: Aug 3-4 Based on: Lectures 17-25, HW9-11