

**This is ungraded examination preparation.**

CSCI 4511/6511 - Exam Prep 3

Write your name here: \_\_\_\_\_

**Instructions:**

This is exam and prep and is not for credit. You should try to complete it on your own, without references.

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## 1 Constraint Satisfaction

Adrijan has enrolled in South Cleric Community College to earn a Certificate in Diner Management.

The degree program requirements are:

**One of:**

DINE 104: Introduction to Diners (MW 1000-1145)

REST 101: Restaurant Management (TR 1100-1230)

HOSP 121: Food Service Fundamentals (TR 1400-1545)

**Two of:**

DINE 201: American Classic Diner Meals (MTWRF 0700-0745)

DINE 203: Exotic Foods in Diners (MWF 1300-1400)

REST 211: Cuisine (MWF 1300-1400)

HOSP 144: Competing With Fast Food (WRF 1400-1515)

**Two of:**

ANTH 212: Food of the Americas (WF 1345-1500)

ORN 212: Desert Waterfowl (TR 930-1130)

DINE 301: The Fine Diner (TR 1115-1400)

HIST 202: Coffee (MTWRF 0800-0845)

**One of:**

Any of the-above listed courses, as an elective.

DINE 104 is a pre-req for all other DINE courses

REST 101 is a pre-req for all other REST courses

HOSP 121 is a pre-req for all other HOSP courses

Adrijan took DINE 104 and ANTH 212 in his first semester. He thinks he can graduate in one more semester. Formulate his choice of courses as a constraint satisfaction problem:

- Enumerate all variables
- Enumerate all constraints

In a correct answer, any complete and consistent solution to your problem as formulated should result in Adrijan graduating after one more semester of study.

(Space for answer)

## 2 Constraint Satisfaction

Solve the problem using backtracking search. You may order the variables and choose new variables however you wish. Show the search tree! No credit will be given if you simply present a solution.

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