

# MA 16200

## Exam 3

Tue., Nov. 13, 2018

6:30 p.m. – 7:30 p.m.

### INSTRUCTOR

### LOCATION

Josiah Banks

WTHR 200 (balcony)

Justin Butler

CL50 224

John Haug

EE 129

Christian Hokaj

WTHR 200

Xinqi Gao

CL50 224

Andreas Kavouras

EE 129

Kindyl King

WTHR 200

Sukshitha Lakshminarayana

WTHR 200

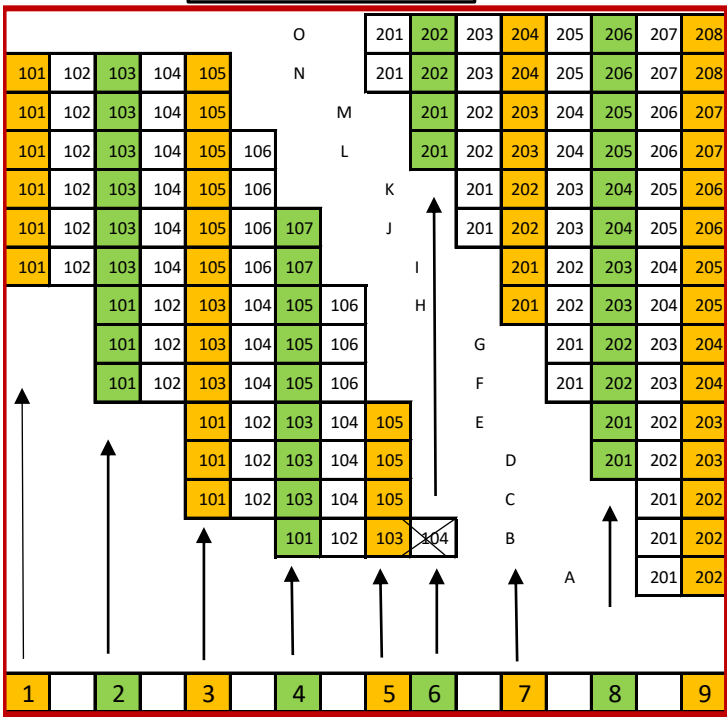
Daniel Tolosa

EE 129

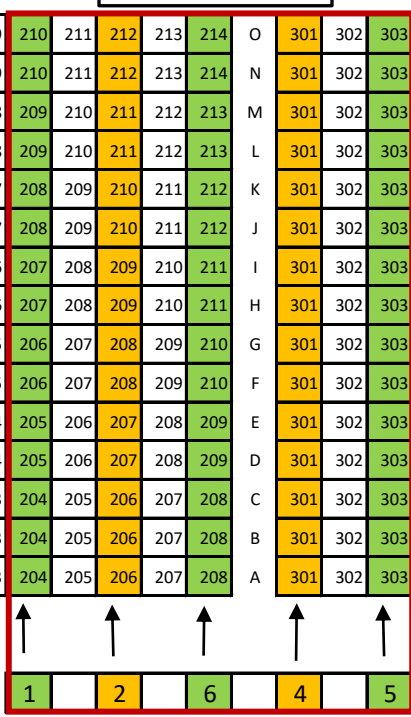
Alexandra Weinert

CL50 224

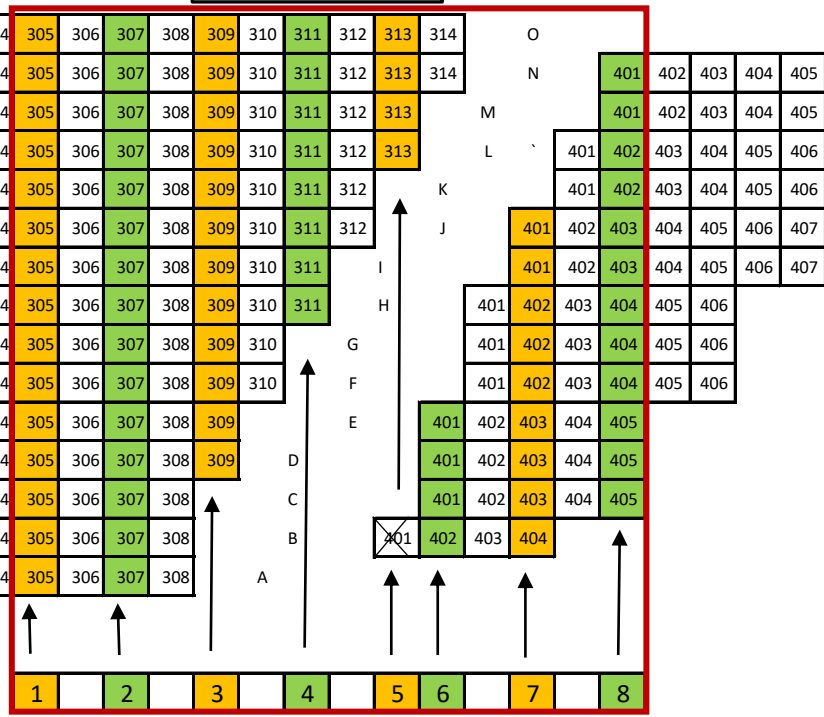
Alexandra Weinert



Justin Butler



Xinqi Gao



Envelope Number

CL50 224  
470/248 Stations

19 19 20 20 20 19 19

|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| T1 | T2 | T3 | T4 | T5 | T6 | T7 | T8 |
| S1 | S2 | S3 | S4 | S5 | S6 | S7 | S8 |
| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 |
| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 |
| P1 | P2 | P3 | P4 | P5 | P6 | P7 | P8 |
| O1 | O2 | O3 | O4 | O5 | O6 | O7 | O8 |
| N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 |
| M1 | M2 | M3 | M4 | M5 | M6 | M7 | M8 |
| L1 | L2 | L3 | L4 | L5 | L6 | L7 | L8 |
| K1 | K2 | K3 | K4 | K5 | K6 | K7 | K8 |
| J1 | J2 | J3 | J4 | J5 | J6 | J7 | J8 |
| I1 | I2 | I3 | I4 | I5 | I6 | I7 | I8 |
| H1 | H2 | H3 | H4 | H5 | H6 | H7 | H8 |
| G1 | G2 | G3 | G4 | G5 | G6 | G7 | G8 |
| F1 | F2 | F3 | F4 | F5 | F6 | F7 | F8 |
| E1 | E2 | E3 | E4 | E5 | E6 | E7 | E8 |
| D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 |
| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 |
| B1 | B2 | B3 | B4 | B5 | B6 | B7 | B8 |
|    |    | A3 | A4 | A5 | A6 |    |    |
|    |    |    |    |    |    |    |    |
|    |    | ↑  | ↑  | ↑  | ↑  |    |    |
|    |    |    |    |    |    |    |    |
|    |    | 1  | 2  | 3  | 4  |    |    |
|    |    |    |    |    |    |    |    |

Envelope Number

John Haug

T  
S  
R  
Q  
P  
O  
N  
M  
L  
K  
J  
I  
H  
G  
F  
E  
D  
C  
B  
A

19 19 20 20 20 19 19

|    |     |     |     |     |     |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|
| T9 | T10 | T11 | T12 | T13 | T14 | T15 | T16 |
| S9 | S10 | S11 | S12 | S13 | S14 | S15 | S16 |
| R9 | R10 | R11 | R12 | R13 | R14 | R15 | R16 |
| Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 |
| P9 | P10 | P11 | P12 | P13 | P14 | P15 | P16 |
| O9 | O10 | O11 | O12 | O13 | O14 | O15 | O16 |
| N9 | N10 | N11 | N12 | N13 | N14 | N15 | N16 |
| M9 | M10 | M11 | M12 | M13 | M14 | M15 | M16 |
| L9 | L10 | L11 | L12 | L13 | L14 | L15 | L16 |
| K9 | K10 | K11 | K12 | K13 | K14 | K15 | K16 |
| J9 | J10 | J11 | J12 | J13 | J14 | J15 | J16 |
| I9 | I10 | I11 | I12 | I13 | I14 | I15 | I16 |
| H9 | H10 | H11 | H12 | H13 | H14 | H15 | H16 |
| G9 | G10 | G11 | G12 | G13 | G14 | G15 | G16 |
| F9 | F10 | F11 | F12 | F13 | F14 | F15 | F16 |
| E9 | E10 | E11 | E12 | E13 | E14 | E15 | E16 |
| D9 | D10 | D11 | D12 | D13 | D14 | D15 | D16 |
| C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
| B9 | B10 | B11 | B12 | B13 | B14 | B15 | B16 |
|    |     | A11 | A12 | A13 | A14 |     |     |
|    |     |     |     |     |     |     |     |
|    |     | ↑   | ↑   | ↑   | ↑   |     |     |
|    |     |     |     |     |     |     |     |
|    |     | 1   | 2   | 3   | 4   |     |     |
|    |     |     |     |     |     |     |     |

Andreas Kavouras

T  
S  
R  
Q  
P  
O  
N  
M  
L  
K  
J  
I  
H  
G  
F  
E  
D  
C  
B  
A

19 19 20 20 20 19 19

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| T17 | T18 | T19 | T20 | T21 | T22 | T23 | T24 |
| S17 | S18 | S19 | S20 | S21 | S22 | S23 | S24 |
| R17 | R18 | R19 | R20 | R21 | R22 | R23 | R24 |
| Q17 | Q18 | Q19 | Q20 | Q21 | Q22 | Q23 | Q24 |
| P17 | P18 | P19 | P20 | P21 | P22 | P23 | P24 |
| O17 | O18 | O19 | O20 | O21 | O22 | O23 | O24 |
| N17 | N18 | N19 | N20 | N21 | N22 | N23 | N24 |
| M17 | M18 | M19 | M20 | M21 | M22 | M23 | M24 |
| L17 | L18 | L19 | L20 | L21 | L22 | L23 | L24 |
| K17 | K18 | K19 | K20 | K21 | K22 | K23 | K24 |
| J17 | J18 | J19 | J20 | J21 | J22 | J23 | J24 |
| I17 | I18 | I19 | I20 | I21 | I22 | I23 | I24 |
| H17 | H18 | H19 | H20 | H21 | H22 | H23 | H24 |
| G17 | G18 | G19 | G20 | G21 | G22 | G23 | G24 |
| F17 | F18 | F19 | F20 | F21 | F22 | F23 | F24 |
| E17 | E18 | E19 | E20 | E21 | E22 | E23 | E24 |
| D17 | D18 | D19 | D20 | D21 | D22 | D23 | D24 |
| C17 | C18 | C19 | C20 | C21 | C22 | C23 | C24 |
| B17 | B18 | B19 | B20 | B21 | B22 | B23 | B24 |
|     |     | A19 | A20 | A21 | A22 |     |     |
|     |     |     |     |     |     |     |     |
|     |     | ↑   | ↑   | ↑   | ↑   |     |     |
|     |     |     |     |     |     |     |     |
|     |     | 1   | 2   | 3   | 4   |     |     |
|     |     |     |     |     |     |     |     |

Daniel Tolosa

EE 129  
468/234 stations

**BALCONY**

|    |    |    |    |    |    |    |    |     |     |      |      |      |      |      |      |      |      |    |      |      |      |      |      |      |      |
|----|----|----|----|----|----|----|----|-----|-----|------|------|------|------|------|------|------|------|----|------|------|------|------|------|------|------|
|    | V1 | V2 | V3 | V4 | V5 | V6 | V  |     | V7  | V8   | V9   | V10  | V11  | V12  | V13  | V14  |      | V  |      | V15  | V16  | V17  | V18  | V19  | V20  |
| U1 | U2 | U3 | U4 | U5 | U6 | U7 | U  | U8  | U9  | U10  | U11  | U12  | U13  | U14  | U15  | U16  | U17  | U  | U18  | U19  | U20  | U21  | U22  | U23  | U24  |
| T1 | T2 | T3 | T4 | T5 | T6 | T7 | T  | T8  | T9  | T10  | T11  | T12  | T13  | T14  | T15  | T16  | T17  | T  | T18  | T19  | T20  | T21  | T22  | T23  | T24  |
| S1 | S2 | S3 | S4 | S5 | S6 | S7 | \$ | \$8 | \$9 | \$10 | \$11 | \$12 | \$13 | \$14 | \$15 | \$16 | \$17 | \$ | \$18 | \$19 | \$20 | \$21 | \$22 | \$23 | \$24 |

A horizontal row of 24 square boxes, each containing a number from 1 to 24 in increasing order from left to right.

**Josiah Banks**

## MAIN FLOOR

The figure displays three 8x8 chessboard diagrams, each showing the placement of a King and a Knight. The boards are labeled as follows:

- Kindyl King:** The King (yellow square) is on A1 and the Knight (green square) is on A8.
- S. Lakshminarayana:** The King (yellow square) is on A8 and the Knight (green square) is on A1.
- Christian Hokaj:** The King (yellow square) is on A1 and the Knight (green square) is on A8.

Each board has columns labeled R1 through R8 and rows labeled Q1 through Q8. The King is represented by a yellow square and the Knight by a green square.

**WTHR 200**  
**480/260 stations**  
**294/215 (Main Floor)**  
**86/45 (Balcony)**