

## COURSE: COMPLEX ANALYSIS

## DEGREE: BACHELOR IN APPLIED MATHEMATICS AND COMPUTING

YEAR: 2 TERM: 2

| -    | WEEKLY PLANNING |  |                    |          |  |   |  |                |  |  |
|------|-----------------|--|--------------------|----------|--|---|--|----------------|--|--|
| WEEK | SESSION         | DESCRIPTION  | GROUPS<br>(mark X) |          | Special room for session<br>(computer classroom,<br>audio-visual |   | WEEKLY PROGRAMMING FOR STUDENT                             |                |  |  |
|      | 2               |  | LECTURES           | SEMINARS | classroom)   |   | DESCRIPTION  | CLASS<br>HOURS | HOMEWORK<br>HOURS<br>(Max. 7h<br>week) |  |
| 1    | 1               | PRESENTATION OF THE COURSE                         | x                  |          | NO   |   | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66           | 6,5                                    |  |
| 1    | 2               | DISCUSSION ON EXERCISES ON THIS SUBJECT            |                    | x        | NO   |   | TO SOLVE EXERCISES ON THIS SUBJECT                         | 1,66           | 1                                      |  |
| 2    | 3               | HOLOMORPHIC FUNCTIONS AND CAUCHY-RIEMANN EQUATIONS | x                  |          | NO   |   | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66           | 6,5                                    |  |
| 2    | 4               |  |                    | х        | NO   | ) | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66           | 1                                      |  |

|   |    | DISCUSSION OF EXERCISES ON THIS SUBJECT   |   |   |    |  |      |     |
|---|----|---|---|---|----|--|------|-----|
| 3 | 5  | TAYLOR SERIES AND RADIUS OF CONVERGENCE   | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 6,5 |
| 3 | 6  | DISCUSSION OF EXERCISES ON THIS SUBJECT   |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 4 | 7  | TAYLOR SERIES AND RADIUS OF CONVERGENCE 2 | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 6,5 |
| 4 | 8  | DISCUSSION OF EXERCISES ON THIS SUBJECT   |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 5 | 9  | ELEMENTARY FUNCTIONS                      | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 6,5 |
| 5 | 10 | DISCUSSION OF EXERCISES ON THIS SUBJECT   |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 6 | 11 | COMPLEX INTEGRATION                       | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 6,5 |
| 6 | 12 | DISCUSSION OF EXERCISES ON THIS SUBJECT   |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 7 | 13 | CAUCHY'S THEOREM<br>TEST 1                | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 6,5 |
| 7 | 14 | DISCUSSION OF EXERCISES ON THIS SUBJECT   |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 8 | 15 | CAUCHY INTEGRAL FORMULA                   | х |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS                    | 1,66 | 6,5 |

|    |    |  |   |   |    | ON THIS SUBJECT  |      |     |
|----|----|--|---|---|----|--|------|-----|
| 8  | 16 | DISCUSSION OF EXERCISES ON THIS SUBJECT                                    |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 9  | 17 | APPLICATIONS OF CAUCHY INTEGRAL FORMULA                                    | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 6,5 |
| 9  | 18 | DISCUSSION OF EXERCISES ON THIS SUBJECT                                    |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 10 | 19 | APPLICATIONS OF CAUCHY INTEGRAL FORMULA 2                                  | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 6,5 |
| 10 | 20 | DISCUSSION OF EXERCISES ON THIS SUBJECT                                    |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 11 | 21 | LAURENT SERIES AND RESIDUES  | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 6,5 |
| 11 | 22 | DISCUSSION OF EXERCISES ON THIS SUBJECT                                    |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 12 | 23 | THE RESIDUE THEOREM<br>TEST 2  | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 6,5 |
| 12 | 24 | DISCUSSION OF EXERCISES ON THIS SUBJECT                                    |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 |     |
| 13 | 25 | APPLICATIONS OF THE RESIDUE THEOREM: EVALUATION OF<br>INTEGRALS AND SERIES | x |   | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66 | 65  |
| 13 | 26 | DISCUSSION OF EXERCISES ON THIS SUBJECT                                    |   | x | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66 | 0,0 |

| 14         | 27 | CONFORMAL MAPS                          | x |   |  | NO | TO READ THE PART OF NOTES AND TEXTBOOKS<br>ON THIS SUBJECT | 1,66  | 6,5 |
|------------|----|---|---|---|--|----|--|-------|-----|
| 14         | 28 | DISCUSSION OF EXERCISES ON THIS SUBJECT |   | х |  | NO | TO SOLVE EXERCISES ON THIS CHAPTER                         | 1,66  |     |
|            | 29 | OVERWIEW                                | x |   |  | NO |  | 1,66  |     |
| Subtotal 1 |    |   |   |   |  |    |  | 48,33 | 91  |

**Total 1** (Horas presenciales y de trabajo del alumno entre las semanas 1-14)

139,33

| 15   |  | TUTORIALS, HAND IN OF EXTRA CREDIT WORK   | x |  |  | NO |  | 2  | 6  |
|--|--|---|---|--|--|----|--|----|----|
| 16   |  |   |   |  |  |    |  |    |    |
| 17   |  | PREPARATION FOR FINAL EXAM AND EVALUATION |   |  |  |    |  | 3  | 6  |
| 18   |  |   |   |  |  |    |  |    |    |
| Subtotal 2   |  |   |   |  |  |    |  | 5  | 12 |
| Total 2 (Horas presenciales y de trabajo del alumno entre las semanas 15-18) |  |   |   |  |  |    |  | 17 |    |

| TOTAL (Total 1 + Total 2) | 156,33 |
|---------------------------|--------|