# Minor in APPLIED MATHEMATICS Minor Requirements Worksheet 2015-2016 Catalog 

Note: This checklist is not intended to replace advising from the major department. Students should consult with the major advisor to determine the appropriate sequence of courses. This checklist is to inform students of minor requirements and course prerequisites only. CSULB Enrollment Services prepares the Academic Requirements Report, which is the official graduation verification.

Before adding any minors, students must check to see if this addition will affect CSULB's Timely Graduation for Undergraduate Students policy. Under this policy, students may earn up to $120 \%$ of the number of units required for the degree in their declared primary major. In addition, the policy requires that a student must file a Request to Graduate form with Enrollment Services by the time the student has completed $100 \%$ of the units required for the declared primary major. Any additional degree objectives (e.g., majors, minors, certificates, etc.) must be completed within the $120 \%$ unit limit. For more information, see http://www.csulb.edu/depts/enrollment/graduation/bachelors/timely_grad_ugrad.html.

The minor in Applied Mathematics is available to any student not majoring in Mathematics or Applied Mathematics.
The student must complete 27 or more semester units as follows:
Lower Division

| Grade | Course \# | Course Title (units in parentheses) | Semester | Prerequisites |
| :--- | :---: | :--- | :--- | :--- |
|  | MATH 122 | Calculus I (4) |  | Appropriate MDPT placement or <br> MATH 111 and 113, or MATH 117 |
|  | MATH 123 | Calculus II (4) |  | MATH 122 |
|  | MATH 224 | Calculus III (4) | MATH 123 |  |
|  | MATH 247 | Introduction to Linear Algebra (3) |  | MATH 123 |

## Upper Division

Take all of the following courses:

| Grade | Course \# | Course Title | Semester | Prerequisites |
| :--- | :--- | :--- | :--- | :--- |
|  | MATH 323 | Introduction to Numerical Analysis (4) |  | MATH 224, and a course in computer <br> programming |
|  | MATH/STAT <br> 380 | Probability and Statistics (3) |  | MATH 224 |

Choose ONE of the following courses:

| Grade | Course \# | Course Title | Semester | Prerequisites |
| :--- | :---: | :---: | :---: | :--- |
|  | MATH 364A | Ordinary Differential Equations I (3) OR |  | MATH 224, and pre/corequisite <br> MATH 247 |
|  | MATH 370A | Applied Mathematics I (3) |  | MATH 123. Not open to Freshmen |

Choose ONE of the following courses:

| Grade | Course \# | Course Title | Semester | Prerequisites |
| :---: | :---: | :---: | :---: | :---: |
|  | MATH 364B <br> MATH 370B <br> MATH 423 | Ordinary Differential Equations II (3) OR <br> Applied Mathematics II (3) OR <br> Intermediate Numerical Analysis (3) OR |  | MATH 364A or 370A |
|  |  |  |  | MATH 364A or 370A |
|  |  |  |  | MATH 247 and 323 |
|  | MATH 470 | Introduction to Partial Differential Equations (3) OR |  | MATH 364A or 370A |
|  | STAT 381 | Mathematical Statistics (3) OR |  | MATH 247 and 380 or STAT 380 |
|  | STAT 482 | Random Processes (3) |  | MATH 247 and 380 or STAT 380 |

**The following upper-division units are excluded: MATH 303, 309, 370A, 370B, 409

