

Program: **Computer Programming**

CIP# 110201

| Competency  | Course and Quarter Assessed |   |         |   |   |   |         |   |   |   |         |   |   |   |  |  |
|---|-----------------------------|---|---------|---|---|---|---------|---|---|---|---------|---|---|---|--|--|
|   | Intro                       |   | Level 1 |   |   |   | Level 2 |   |   |   | Level 3 |   |   |   |  |  |
|   | 1                           | 2 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 | 1       | 2 | 3 | 4 |  |  |
| The student will understand that there are multiple components of learning program languages.   | X                           |   | X       |   |   |   | X       |   |   |   | X       |   |   |   |  |  |
| The student will understand that certain methods of programming are more efficient and effective based on expected outcomes.                              |                             |   | X       |   |   |   | X       |   |   |   | X       |   |   |   |  |  |
| The student will understand that algorithm development is integral to solving mathematical or programming problems.                                       |                             |   |         | X |   |   |         | X |   |   |         | X |   |   |  |  |
| The student will understand that different target audiences use certain platforms for particular usability.   |                             | X |         | X |   |   |         | X |   |   |         | X |   |   |  |  |
| The student will understand that proper planning and documenting programs allows for maintenance and sustainability.                                      | X                           |   | X       |   |   |   | X       |   |   |   | X       |   |   |   |  |  |
| The student will understand that modular design creates future expansion potential.   |                             |   |         | X |   |   |         | X |   |   |         | X |   |   |  |  |
| The student will understand that different project workflow techniques are more effective within certain cultures or constraints.                         |                             | X |         | X |   |   |         | X |   |   |         | X |   |   |  |  |
| The student will understand that incorporating critique and feedback into design creates more robust programs.  |                             | X |         |   |   | X |         |   |   | X |         |   |   | X |  |  |
| The student will understand security and ethics in regards to computing.  |                             |   |         |   | X |   |         |   | X |   |         |   | X |   |  |  |
| The student understands the concepts and influences of entrepreneurship as well as the effects leadership can have on personal growth and career success. |                             |   | X       |   |   |   | X       |   |   |   | X       |   |   |   |  |  |