

Instructions:

Fee \$25

1. Print these pages.
2. Circle the correct answers and transfer them to the [answer sheet](#).
3. Page down to the last page for the [verification forms](#) and mailing instructions.
4. Use the 2011 NEC code book or this language ([click here](#)) & compare it to the 2008 NEC code.

Course: 12109 2011 NEC CODE UPDATES PART 1

This course is valid for these credentials:

Credential Description	Cred Code	Credit Hours
Registered - Beginner Electrician	BE	2.0
Commercial Electrical Inspector	CEI	2.0
Industrial Journeyman Electrician	IJE	2.0
Journeyman Electrician	JE	2.0
Master Electrician	ME	2.0
Residential Journeyman Electrician	RJE	2.0
Residential Master Electrician	RME	2.0
UDC-Electrical Inspector	UEI	2.0

2011 NEC Code Updates Part 1

1. 100 The definition of ampacity was _____ for the 2011 NEC.
- a. revised
 - b. deleted
 - c. removed
 - d. added

-
2. 100 Definitions of _____ and _____ have been revised.
- a. automatic
 - b. nonautomatic
 - c. none of the above
 - d. both a and b

-
3. 100 The definition of bathroom has been revised to include areas with a basin and such things as a _____.
- a. Shower
 - b. bidet
 - c. urinal
 - d. all of the above

-
4. 100 The definition of the term grounding conductor has been _____ from Article 100. Where this term was previously used, the more appropriate terms, grounding electrode conductor or bonding jumper will be used.
- a. revised
 - b. deleted
 - c. moved
 - d. none of the above

-
5. 100 The definition of intersystem bonding termination was _____ for simplicity and clarity.

- a. revised
- b. deleted
- c. moved
- d. none of the above

-
6. 100 The definition of a separately derived system was _____ and simplified for clarity.
- a. amended
 - b. deleted
 - c. moved
 - d. none of the above

Definitions related to services were added or revised in Article 100 to clarify when these definitions are covered under the scope of the NEC.

7. _____ The overhead conductors between the service point and the first point of connection to the service-entrance conductors at the building or other structure.
- a. Service Conductors, Overhead
 - b. Service Conductors, Underground
 - c. Service Drop
 - d. Service-Entrance Conductors, Overhead System
 - e. Service-Entrance Conductors, Underground System
 - f. Service Lateral
 - g. Service Point
8. _____ The underground conductors between the service point and the first point of connection to the service-entrance conductors in a terminal box, meter or other enclosure, inside or outside the building wall.
- a. Service Conductors, Overhead
 - b. Service Conductors, Underground
 - c. Service Drop
 - d. Service-Entrance Conductors, Overhead System
 - e. Service-Entrance Conductors, Underground System
 - f. Service Lateral
 - g. Service Point

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9. _____ The overhead conductors between the utility electric supply system and the service point.
- a. Service Conductors, Overhead
 - b. Service Conductors, Underground
 - c. Service Drop
 - d. Service-Entrance Conductors, Overhead System
 - e. Service-Entrance Conductors, Underground System
 - f. Service Lateral
 - g. Service Point

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10. _____ The service conductors between the terminals of the service equipment and a point usually outside the building, clear of building walls, where joined by tap or splice to the service drop or overhead service conductors.
- a. Service Conductors, Overhead
 - b. Service Conductors, Underground

- c. Service Drop
 - d. Service-Entrance Conductors, Overhead System
 - e. Service-Entrance Conductors, Underground System
 - f. Service Lateral
 - g. Service Point
-

11. _____ The service conductors between the terminals of the service equipment and the point of connection to the service lateral or underground service conductors.

- a. Service Conductors, Overhead
 - b. Service Conductors, Underground
 - c. Service Drop
 - d. Service-Entrance Conductors, Overhead System
 - e. Service-Entrance Conductors, Underground System
 - f. Service Lateral
 - g. Service Point
-

12. _____ The underground conductors between the utility electric supply system and the service point.

- a. Service Conductors, Overhead
 - b. Service Conductors, Underground
 - c. Service Drop
 - d. Service-Entrance Conductors, Overhead System
 - e. Service-Entrance Conductors, Underground System
 - f. Service Lateral
 - g. Service Point
-

13. _____ The point of connection between the facilities of the serving utility and the premises wiring.

- a. Service Conductors, Overhead
 - b. Service Conductors, Underground
 - c. Service Drop
 - d. Service-Entrance Conductors, Overhead System
 - e. Service-Entrance Conductors, Underground System
 - f. Service Lateral
 - g. Service Point
-

14. 100 Where there is no _____, the point of connection is considered to be the point of entrance of the service conductors into the building.

- a. terminal box
 - b. meter
 - c. other enclosure
 - d. all of the above
-

15. 100 The service point can be described as the point of demarcation between where the serving utility ends and the premises wiring begins. The serving municipal inspector generally specifies the location of the service point based on their conditions of service.

- a. true
- b. false

16. 100 The definition of *system bonding jumper* has been _____ to include the new term *supply-side bonding jumper* and has been relocated to Article 100.

- a. revised
- b. deleted
- c. moved
- d. none of the above

17. 100 New definition and accompanying informational note were _____ for uninterruptible power supply (UPS).

- a. added
- b. deleted
- c. moved
- d. none of the above

18. 100 General requirements for terminating flexible, fine-stranded cables and conductors have been added to article _____.

- a. 110. 3(b)
- b. 110.14
- c. 110. 45
- d. 110. 24

19. 110.24 Non-dwelling unit service equipment required to be field-marked with the amount of available fault current when _____.

- a. installed
- b. modified
- c. none of the above
- d. both a & b

20. 110.24 Dwelling unit service equipment required to be field-marked with the amount of available fault current when _____.

- a. installed
- b. modified
- c. none of the above
- d. both a & b

21. 110.24 Non-dwelling unit service equipment required to be field-marked with the amount of available fault current when installed or modified. Exception; The field marking requirements shall not be required in industrial installations where conditions of _____ ensure that only qualified persons service the equipment.

- a. maintenance
- b. supervision
- c. none of the above
- d. both a & b

22. 110.26 New exception was added to working space requirements to address _____ that often extend into the required working space for electrical equipment.

- a. computer equipment
- b. meters

- c. communication equipment
 - d. none of the above
-

23. 110.26 Lighting sources for working spaces about electrical equipment can be only controlled by automatic means.

- a. true
- b. false

24. List of items that are required to be marked with an enclosure type in 110.28 has been _____.

- a. deleted
- b. expanded
- c. relocated
- d. none of the above

25. Section 110.28 has been relocated from _____.

- a. 110.20
- b. 220.20
- c. none of the above
- d. both a & b

26. 110.31(A) Requirements for electrical equipment located in electrical _____ have been rearranged and expanded for usability.

- a. areas
- b. vaults
- c. none of the above
- d. both a & b

27. 110.31(A) Electrical Vaults. Where an electrical vault is required or specified for conductors and equipment operating at over 600 volts, nominal, the following shall apply. (1) Walls and Roof. The walls and roof shall be constructed of materials that have adequate structural strength for the conditions, with a minimum fire rating of _____ hours. For the purpose of this section, studs and wallboard construction shall not be permitted.

- a. 1
- b. 2
- c. 3
- d. 4

28. 110.31(A) Electrical Vaults. Where an electrical vault is required or specified for conductors and equipment operating at over 600 volts, nominal, the following shall apply. (2) Floors. The floors of vaults in contact with the earth shall be of concrete that is not less than 102 mm (4 in.) thick, but where the vault is constructed with a vacant space or other stories below it, the floor shall have adequate structural strength for the load imposed on it and a minimum fire resistance of _____ hours.

- a. 1
- b. 2
- c. 3
- d. 4

29. 110.31(A) Electrical Vaults. Where an electrical vault is required or specified for conductors and equipment operating at over 600 volts, nominal, the following shall apply. (3) Doors. Each doorway leading into a vault from the building interior shall be provided with a tight-fitting door that has a minimum fire rating of _____ hours. a. 1
b. 2
c. 3
d. 4

30. 110.31(A) Electrical Vaults. Where an electrical vault is required or specified for conductors and equipment operating at over 600 volts, nominal, the following shall apply. Exception to (1), (2), and (3): Where the vault is protected with automatic sprinkler, water spray, carbon dioxide, or halon, construction of _____ hour rating shall be permitted. a. 1
b. 2
c. 3
d. 4

31. 110.31(A) (3) Electrical Vaults. The authority having jurisdiction may be permitted to require such a door for an exterior or interior wall or ceiling opening where conditions allow. a. true
b. false

32. 110.31(A) Electrical Vaults. Where an electrical vault is required or specified for conductors and equipment operating at over 600 volts, nominal, the following shall apply. (4) Locks. Doors shall be equipped with locks, and doors shall be kept locked, access being allowed only to qualified persons. Personnel doors shall swing out and be equipped with _____ that are normally latched but open under simple pressure. a. panic bars
b. pressure plates
c. or other devices
d. all of the above

33. 110.31(A) Electrical Vaults. Where an electrical vault is required or specified for conductors and equipment operating at over 600 volts, nominal, the following shall apply. (5) Transformers. Where a transformer is installed in a vault as required by Article 450, the vault shall be constructed in accordance with the requirements of Part III of Article 450. a. true
b. false

34. 110.31 Informational Note No. 2: A typical 3-hour construction is ____ inch thick reinforced concrete. a. 2
b. 4
c. 6
d. 8

35. Various sections of the Code where a grounded conductor was not required were eliminated at _____. a. 200.2

- b. 300.2
- c. none of the above
- d. both a & b

36. 200.4 New section will not permit a neutral conductor to be used for more than one

- _____.
- a. branch circuits
 - b. feeders
 - c. none of the above
 - d. both a & b

37. 200.7(C)(1) _____ switch loops can be used only for the supply to the switch but not as a return conductor from the switch to the outlet.

- a. Reidentified
- b. Listed
- c. none of the above
- d. both a & b

38. 210.8 Most GFCI devices are now required to be installed in a readily accessible location.

- a. true
- b. false

39. 210.8(7) A GFCI is now required for all 125-volt, single-phase, 15- and 20-ampere receptacles installed within _____ of the outside edge of a dwelling laundry, utility or wet bar sinks.

- a. 1.8 m
- b. 6 ft
- c. 72"
- d. all of the above

40. 210.8 Exception-Receptacles located around sinks at a _____ are no longer exempt from GFCI protection.

- a. dentist's office
- b. doctor's office
- c. dentist's or doctor's clinics
- d. all of the above

41. 210.8 Receptacles installed at other than dwelling unit indoor _____ locations now require GFCI protection.

- a. wet
- b. damp
- c. none of the above
- d. both a & b

42. 210.8 Receptacles installed in locker rooms now require _____ protection.

- a. AFCI
- b. GFCI
- c. none of the above
- d. both a & b

43. 210.8(B)8 New provisions were added to require GFCI protection to all types of nondwelling unit garages where _____ are used, not just those garages under the scope of Article 511.

- a. electrical diagnostic equipment
- b. electrical hand tools
- c. portable lighting equipment
- d. all of the above

44. 210.12 Type ____ cable was added to the list of approved wiring methods permitted to protect the home run when a listed outlet branch-circuit Type AFCI is used.

- a. BX
- b. AC
- c. MC
- d. all of the above

45. 210.12 If a AFCI device is installed at the first outlet box for AFCI protection of a branch circuit as allowed by code then a non metallic sheathed cable can be used as the wiring method for the remainder of the receptacles.

- a. true
- b. false

46. 210.12 The allowance for nonmetallic conduit or tubing encased in not less than ____ inches of concrete was added to the acceptable wiring methods for AFCI protection located at the first outlet of a branch circuit.

- a. 1
- b. 2
- c. 3
- d. 4

47. New AFCI requirements for modifications to existing dwellings were added to_____.

- a. 210.12
- b. 211.12
- c. 210.13
- d. 211.136

48. 210.52 Listed receptacle outlet assemblies are now permitted to be installed on or in _____ countertops to serve as the required countertop receptacles.

- a. bathroom
- b. kitchen
- c. both a or b
- d. neither a or b

49. 210.52 A _____ outlet is required at all balconies, decks, and porches that are accessible from inside of a dwelling unit, regardless of the size of the balcony, deck, or porch.

- a. receptacle
- b. lighting
- c. none of the above
- d. both a & b

50. 210.52 At least one receptacle and lighting outlet is required to be installed in all accessory building with or without electric power for any future installations.

- a. true
- b. false

51. 210.52 At least one receptacle outlet is required to be installed in all _____ with electric power.

- a. basements
- b. garages
- c. accessory buildings
- d. all of the above

52. 210.52 Foyers that are not part of a hallway in accordance with 210.52(H) and that have an area that is greater than 60 sq-ft shall have a receptacle(s) located in each wall space 3 ft or more in width and unbroken by _____.

- a. doorways
- b. floor to ceiling windows
- c. similar openings
- d. all of the above

53. 225.18 Overhead spans of open conductors and open multiconductor cables of not over 600 volts, nominal, shall have a clearance of not less _____ over track rails of railroads.

- a. 7.5 m
- b. 24.5 ft
- c. none of the above
- d. both a or b

54. 225.27 A raceway _____ is required at outside underground branch circuit and feeder raceways when entering a building.

- a. seal
- b. transition
- c. none of the above
- d. both a or b

55. 225.30 More than one feeder or branch circuit is _____ allowed to supply a building or structure, regardless of which building or structure the feeder or branch circuit originates from.

- a. now
- b. still
- c. not
- d. all of the above

56. 230.24 A reduction of clearance for overhead service conductors above a roof of 900 mm (3 ft) is permitted where the roof area is guarded or isolated and where the voltage between conductors is reduced to _____.

- a. 240
- b. 277
- c. 300

d. 480

57. 230.42 Service grounded conductor(s) can be sized and rated at _____ percent of the continuous and noncontinuous load when not connected to an overcurrent device.

- a. 80
 - b. 100
 - c. 125
 - d. none of the above
-

58. 230.44 Labeling requirement for cable trays containing service conductors was moved from exception to mandatory language.

- a. true
 - b. false
-

59. 230.44 List of permitted wiring methods for cable trays containing service conductors was _____.

- a. deleted
 - b. expanded
 - c. relocated
 - d. added
-

60. 230.44 Cable tray systems shall be permitted to support service-entrance conductors. Cable trays used to support service-entrance conductors shall contain only service-entrance conductors and shall be limited to the following methods:

- a. Type SE cable
 - b. Type MC cable
 - c. Neither a or b
 - d. both a or b
-

61. 230.44 Cable tray systems shall be permitted to support service-entrance conductors. Cable trays used to support service-entrance conductors shall contain only service-entrance conductors and shall be limited to the following methods:

- a. all of the below
 - b. Single Thermoplastic-Insulated Conductors 1/0 and Larger with CT rating
 - c. Type MI cable
 - d. Type IGS cable
-

2011 NEC Code Updates Part 1-Quiz Answer Sheet

- | | | | | | |
|-----------|---------------|-----------|---------|-----------|---------|
| <u>1</u> | a b c d | <u>21</u> | a b c d | <u>41</u> | a b c d |
| <u>2</u> | a b c d | <u>22</u> | a b c d | <u>42</u> | a b c d |
| <u>3</u> | a b c d | <u>23</u> | a b c d | <u>43</u> | a b c d |
| <u>4</u> | a b c d | <u>24</u> | a b c d | <u>44</u> | a b c d |
| <u>5</u> | a b c d | <u>25</u> | a b c d | <u>45</u> | a b c d |
| <u>6</u> | a b c d | <u>26</u> | a b c d | <u>46</u> | a b c d |
| <u>7</u> | a b c d e f g | <u>27</u> | a b c d | <u>47</u> | a b c d |
| <u>8</u> | a b c d e f g | <u>28</u> | a b c d | <u>48</u> | a b c d |
| <u>9</u> | a b c d e f g | <u>29</u> | a b c d | <u>49</u> | a b c d |
| <u>10</u> | a b c d e f g | <u>30</u> | a b c d | <u>50</u> | a b c d |
| <u>11</u> | a b c d e f g | <u>31</u> | a b c d | <u>51</u> | a b c d |
| <u>12</u> | a b c d e f g | <u>32</u> | a b c d | <u>52</u> | a b c d |
| <u>13</u> | a b c d e f g | <u>33</u> | a b c d | <u>53</u> | a b c d |
| <u>14</u> | a b c d | <u>34</u> | a b c d | <u>54</u> | a b c d |
| <u>15</u> | a b c d | <u>35</u> | a b c d | <u>55</u> | a b c d |
| <u>16</u> | a b c d | <u>36</u> | a b c d | <u>56</u> | a b c d |
| <u>17</u> | a b c d | <u>37</u> | a b c d | <u>57</u> | a b c d |
| <u>18</u> | a b c d | <u>38</u> | a b c d | <u>58</u> | a b c d |
| <u>19</u> | a b c d | <u>39</u> | a b c d | <u>59</u> | a b c d |
| <u>20</u> | a b c d | <u>40</u> | a b c d | <u>60</u> | a b c d |
| | | | | <u>61</u> | a b c d |

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