# 学校要求：7月16日前完成指定的网课及网课中的以下任务（该网课老师使用Eclipse IDE）：

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| 考核内容 | 内容描述 |
| 4 Online Quizzes | Multiple choice questions and code snippets |
| 9 Homework Assignments | Programming assignments |
| 2 Projects | Larger programming assignments |

# Course Outline

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| **Unit** | **Topics** |
| I | ****Introduction****   * Computer languages * Programming concepts * Tools and resources, Java Development Kit (JDK), Eclipse IDE * Introduce Java, your first Java console program |
| II | ****Data Types****   * Variables, data types * Arithmetic calculations * Math functions and constants * Operator precedence * User Input |
| II | ****Control Statements****   * Making decisions * Logical operators * The conditional operator * The switch statement * Loops: Nested loops, continue, break |
| III | ****Methods and Class (Arrays, Methods, Strings, Class)****   * Strings and operation on strings * Arrays: Initializing, using, arrays of characters, arrays of arrays * Class * Methods |
| IV | ****Class and Objects (Class, Error handling, Variable scopes & life time)****   * Object oriented vs. procedural programming methodologies. * Classes and objects * Reusable codes |
| V | ****Object Oriented Programming (Advanced)****   * Encapsulation and Access control * Inheritance * Abstract Class * Interface |
| VI | ****Advanced Topics (Collections, Generics, Input/Output)****   * Java collections * Generics * File handling |
| VII | ****Graphics Programming****   * AWT class hierarchy * Event driven programming * Windows and Controls * Layout managers, panels, canvases |