

# **Informática**

**Curso 2002-2003**

**Pedro Reina**





## Presentación

### Objetivos del curso

El propósito de este curso es enseñar los conceptos fundamentales de la informática personal, presentándolos del modo más general posible, para que puedan ser aplicados a diversas situaciones. La audiencia a la que se orienta el curso va desde el principiante que parte de cero hasta la persona que ya conoce algo de informática y busca obtener una base más sólida y ganar amplitud de miras.

Otro propósito, tan importante como la simple trasmisión de conocimientos, es la convicción del lector de que la libertad de elección y de pensamiento es más importante que la tecnología; para ello, se intentará ofrecer una visión completa del mundo de la informática personal, potenciando la utilización de software libre o gratuito.

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### Orientaciones al estudiante

Aprender informática es un proceso en el que hay que conjuntar la teoría con la práctica, como en tantas otras cosas en la vida. No sirve de nada saber teoría si no se sabe cómo se lleva a la práctica y tampoco sirve de nada aprender a pulsar unas cuantas teclas si no se sabe en qué se basan esas pulsaciones. Se han plasmado por escrito las partes más teóricas para disponer de más tiempo para los contenidos prácticos; el curso consiste en la adecuada conjunción de estas dos facetas.

Se ha pretendido que estas hojas se puedan entender por sí solas. Cada una de ellas es independiente de las demás, por lo que pueden servir como referencia para consultar puntos concretos; no están numeradas, porque pueden ser modificadas en cualquier momento.

Un buen consejo a todos los principiantes: hay que leer la información que aparezca en la pantalla. Está pensada para ayudar a quien usa el ordenador, no para confundir. Si en una primera lectura algo no está claro, hay que volver a leerlo. Hay que usar la lógica y el sentido común. Las cosas están pensadas para que sean sencillas y funcionen bien; en general, esto ocurre así. Se aprende más cuando se piensa individualmente que cuando se pregunta sin más.

Es normal no comprender perfectamente todos los conceptos la primera vez que se leen; hay que practicarlos y volver a leerlos. El trabajo personal del alumno no se puede reemplazar por ningún otro método. El proceso de aprendizaje exige algo de tiempo para apreciar cómo encajan todas las partes, pero es muy gratificante llegar a apreciarlo, así como al final del curso llegar a tener la interna convicción de poder realizar más tareas informáticas y seguir avanzando en el conocimiento sin ayuda externa.

### CD-ROM del curso

Este curso impreso se complementa con un CD-ROM que contiene programas y material de libre distribución, así como material didáctico adicional. El CD-ROM se puede usar y reproducir con total libertad. Para conocer su contenido hay que leer el archivo `Leeme.txt` que se encuentra en el directorio raíz.

## Bibliografía

Para realizar este libro se han consultado numerosos libros, revistas y material de Internet. Sin embargo, en esta bibliografía sólo se incluyen los principales libros utilizados.

- ◆ Título: **Open Sources, Voices from the Open Source Revolution.**  
Autores: Varios, editado por Chris DiBona, Sam Ockman y Mark Stone.  
Editorial: O'Reilly. ISBN: 1-56592-583-3  
Este libro se puede obtener gratuitamente en versión electrónica.
- ◆ Título: **Linux: Instalación y primeros pasos.**  
Autor: Matt Welsh.  
Libro de distribución gratuita.
- ◆ Título: **Los secretos de Windows 95.**  
Autores: Brian Livingston y David Straub.  
Editorial: IDG Books, Anaya Multimedia. ISBN: 84-7614-802-X.
- ◆ Título: **Special Edition Using StarOffice.**  
Autores: Michael Koch and Sarah Murray, with Werner Roth.  
Editorial: Que. ISBN: 0-7897-1993-2
- ◆ Título: **HTML Creación de páginas Web.**  
Autor: Alonso Álvarez García.  
Editorial: Anaya Multimedia. ISBN: 84-415-0242-0.
- ◆ Título: **The C Programming Language.**  
Autores: Brian W. Kernighan y Dennis M. Ritchie.  
Editorial: Prentice Hall. ISBN: 0131103628.

## Agradecimientos

- ◆ **Julia Rodríguez** ha corregido originales, ha aportado numerosas sugerencias para mejorar la legibilidad general y, sobre todo, es el constante apoyo sin el que el curso no existiría.
- ◆ **Carlos Palmero, Jesús García, Jesús González, César Casado y Fernando Lisón** han aportado rectificaciones técnicas y gramaticales e indicado modos de perfeccionar el curso.
- ◆ La asociación **Hispalinux**, especialmente **Roberto Santos**, ha apoyado 
- ◆ La asociación **Hispalinux**, especialmente **Roberto Santos**, ha apoyado  con todas sus posibilidades la difusión y uso de este libro.
- ◆ Bastantes alumnos que han seguido los cursos han realizado valiosas sugerencias.

## Programas utilizados

Para la materialización del curso se han utilizado, principalmente, los siguientes programas:

- ◆ StarOffice Writer. Procesador de textos.
- ◆ StarOffice Draw. Creación y manipulación de imágenes vectoriales.
- ◆ GIMP. Creación y manipulación de imágenes bitmap.
- ◆ Mozilla. Búsqueda de información en Internet.
- ◆ Gnome Transfer Manager. Descarga de archivos en Internet.

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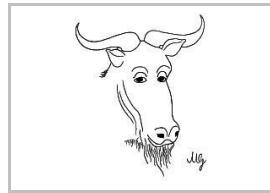
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## Índice de hojas (1)

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### Introducción

1. Portada
2. Presentación
3. GNU Free Documentation License
4. Índice de hojas (1)
5. Índice de hojas (2)
6. Itinerarios sugeridos
7. Carátula del CD-ROM

### Fundamentos

1. Portada
2. Componentes del ordenador personal
3. Redes de ordenadores
4. Las medidas en informática
5. Hardware
6. Seguridad en informática
7. Los virus informáticos
8. Licencias de software
9. Sistemas operativos (1)
10. Sistemas operativos (2)
11. El teclado
12. El proceso de arranque
13. Instalación de sistemas operativos

### Tipografía

1. Portada
2. Vocabulario básico
3. Tipografía digital
4. Tabla ANSI
5. Fabricantes
6. Tipos de Microsoft
7. Apostrophic Laboratories
8. Tipos seleccionados (1)
9. Tipos seleccionados (2)
10. Tipos seleccionados (3)
11. Tipos seleccionados (4)
12. Tipos seleccionados (5)
13. Tipos seleccionados (6)
14. Tipo “DistroBats”
15. Tipo “StarBats”
16. Tipo “StarMath”

### GNU/Linux

1. Portada
2. Entornos de trabajo
3. Usuarios
4. Sesiones
5. Primeros pasos con GNOME
6. Manejo del ratón
7. Gestores de ventanas
8. Arranque de programas
9. Manejo de programas
10. Cuadros de diálogo
11. El sistema de archivos
12. Organización del sistema de archivos
13. Manejo de un documento
14. Introducción de texto en AbiWord
15. Creación de dibujos con GIMP
16. Manejo de tipos
17. Sistemas de ayuda
18. Gestión de archivos (1)
19. Gestión de archivos (2)
20. Archivos de texto
21. Trabajo en consola
22. Control de procesos
23. Personalización de GNOME

### Windows

1. Portada
2. Entrada y salida
3. Manejo del ratón
4. Partes de una ventana
5. Arranque de programas
6. Manejo de programas
7. Los cuadros de diálogo
8. El sistema de archivos
9. Gestión de archivos
10. La papelera de reciclaje
11. Organización del disco duro
12. Manejo de un documento
13. Acceso rápido a documentos
14. Introducción de texto en WordPad
15. Creación de dibujos con MS Paint
16. Manejo de tipos
17. El portapapeles
18. El sistema de ayuda
19. El Explorador
20. Recursos compartidos en red
21. Mantenimiento del disco duro
22. Microsoft Backup
23. El panel de control
24. Personalización de la interfaz

## **Internet**

- 1. Portada
- 2. Historia
- 3. Fundamentos técnicos (1)
- 4. Fundamentos técnicos (2)
- 5. Conexión con GNU/Linux
- 6. Conexión con Windows
- 7. Programas navegadores
- 8. Netscape Navigator
- 9. Navegación en la Web

- 10. Buscadores
- 11. Compresión de datos
- 12. Compresores para Windows
- 13. Compresores para GNU/Linux
- 14. Transferencia de ficheros
- 15. Gestores de descargas
- 16. Correo electrónico (1)
- 17. Correo electrónico (2)
- 18. Telnet

## **StarOffice**

- 1. Portada
- 2. Puesta en marcha
- 3. Instalación en Windows
- 4. Instalación en GNU/Linux
- 5. Aspecto general

- 6. Los módulos
- 7. Manejo de un documento (1)
- 8. Manejo de un documento (2)
- 9. El sistema de ayuda

## **Draw**

- 1. Portada
- 2. Estudio de gráficos
- 3. La ventana de Draw
- 4. Creación de objetos
- 5. Curvas de Bézier
- 6. Texto

- 7. Modificación de objetos
- 8. Líneas y rellenos
- 9. Transformaciones
- 10. Relación entre objetos
- 11. Efectos
- 12. Imprimir y exportar

## **Image**

- 1. Portada
- 2. Crear

- 3. Dibujar
- 4. Modificar

## **Writer**

- 1. Portada
- 2. La ventana de Writer
- 3. Determinación del papel
- 4. Introducción de texto
- 5. Formato de párrafos
- 6. Modos de visualización
- 7. Tipo de letra
- 8. Uso de bloques (1)
- 9. Uso de bloques (2)
- 10. Una práctica
- 11. Impresión
- 12. Buscar y reemplazar
- 13. Tabuladores

- 14. Listas, enumeraciones y esquemas
- 15. Herramientas gramaticales
- 16. Columnas
- 17. Estilos
- 18. Plantillas
- 19. Gestión de documentos largos
- 20. Tablas (1)
- 21. Tablas (2)
- 22. Marcos
- 23. Imágenes
- 24. Fórmulas
- 25. Elementos ornamentales
- 26. Consejos sobre edición

## **Calc**

- 1. Portada
- 2. Creación de una hoja de cálculo
- 3. Edición de una hoja de cálculo
- 4. Manejo de fórmulas

- 5. Las funciones
- 6. Formatos
- 7. Diagramas
- 8. Un ejemplo: dos datos

## **Base**

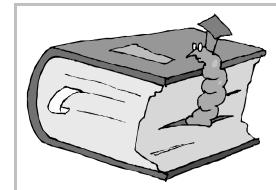
- 1. Portada
- 2. Bases de datos
- 3. Creación
- 4. Uso de tablas
- 5. Formularios

- 6. Consultas
- 7. Informes
- 8. Cartas en serie
- 9. Exportar a Writer
- 10. Uso de tablas Access

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## Índice de hojas (2)

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### Multimedia

- 1. Portada
- 2. Digitalización de imágenes
- 3. Audio
- 4. Presentaciones (1)
- 5. Presentaciones (2)
- 6. Vídeo

### Creación Web

- 1. Portada
- 2. Fundamentos del HTML
- 3. Creación de páginas Web
- 4. Elementos del HTML (1)
- 5. Elementos del HTML (2)
- 6. Tablas
- 7. GIMP para la Web

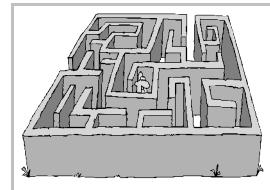
### Programación

- 1. Portada
- 2. Conceptos generales
- 3. El lenguaje C
- 4. C en GNU/Linux
- 5. Primeros programas
- 6. Elementos fundamentales
- 7. Entrada y salida
- 8. Sentencias de control (1)
- 9. Sentencias de control (2)
- 10. Arrays
- 11. Cadenas
- 12. Funciones
- 13. Estilo de programación
- 14. Ciclo de vida
- 15. Un ejemplo completo (1)
- 16. Un ejemplo completo (2)

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## Itinerarios sugeridos

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### GNU/Linux o Windows

Este curso de Informática puede ser seguido con pocas diferencias usando como sistema operativo tanto GNU/Linux como Microsoft Windows. Será decisión de quienes den el curso usar uno u otro. Incluso es posible utilizar ambos, para así tener un conocimiento más amplio de las herramientas informáticas. La recomendación del autor es utilizar GNU/Linux, por ser libre, gratuito, más seguro y más estable.

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- ◆ Introducción
- ◆ Fundamentos
- ◆ Tipografía
- ◆ GNU/Linux
- ◆ Internet
- ◆ StarOffice
- ◆ Draw
- ◆ Image
- ◆ Writer
- ◆ Calc
- ◆ Base
- ◆ Multimedia

#### Tecnologías de la Información para Bachillerato

- ◆ Introducción
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- ◆ StarOffice
- ◆ Writer
- ◆ Calc
- ◆ Base
- ◆ Creación Web
- ◆ Programación

#### Informática para docentes

- ◆ Introducción
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- ◆ Tipografía
- ◆ GNU/Linux
- ◆ StarOffice
- ◆ Writer
- ◆ Internet
- ◆ Calc

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**Carátula del CD-ROM**

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# Informática

Curso 2002-2003

Pedro Reina

Este CD-ROM contiene programas y material docente que se pueden usar y reproducir gratuitamente. Es el complemento de un libro para la enseñanza de la Informática que también se puede usar y reproducir del mismo modo. En el CD-ROM está incluido el libro, listo para ser impreso.

### Resumen del contenido

- ◆ Programas libres para GNU/Linux y MS Windows
- ◆ Programas gratuitos para GNU/Linux y MS Windows
- ◆ Tipos de letras de libre distribución
- ◆ Muestras de imágenes, sonido y vídeo
- ◆ Libro de Informática para la Enseñanza Secundaria
- ◆ Documentación adicional

### Más información

Para ampliar información sobre el contenido del CD hay que abrir con cualquier editor de textos el archivo `leeme.txt` ubicado en el directorio raíz del CD-ROM.

