



# HOW TO HIDE YOUR AFFAIR: A SHORT HISTORY OF CRYPTOGRAPHY

Presented by: **Richard Norwood**

**Wednesdays, Sept. 1, 8, 15, and 22 ▪ 10 am–12 noon**

**ONLINE via ZOOM**

Sending secret messages, or cryptography, began with the invention of writing, and has been with us ever since. Whenever the technology of communication has changed and advanced, cryptography has changed in lockstep. From the time when people could encode and decode messages with a pencil and paper, we have advanced to a stage where a powerful computer is a necessity.



THE ENIGMA MACHINE

In the beginning, code-breaking depended on linguists and language translators. Now the field is dominated by mathematicians and computer experts. Early cryptography involved both codes and ciphers. As the crypto-technology changed from hand calculations to machines, and later computers, ciphers became dominant.

In this course we will survey those changes and examine instances where code-breaking has changed history.

**Preferred registration deadline\*: August 30, 2021**

\*Early enrollment helps us with our planning; also, those who register by the preferred deadline will be given priority in case of over-enrollment.

## **Enrollment form: Short History of Cryptography**

Wednesdays, September 1, 8, 15, and 22

**VISTAS members \$25; non-members \$38**

➤ **EITHER pay online** on our website by secure credit card through PayPal\*:

<https://www.vistaslifelonglearning.org/current-courses>

\*Subject to a 3% processing fee

➤ **OR mail this form** and your check to: VISTAS Lifelong Learning, Inc.

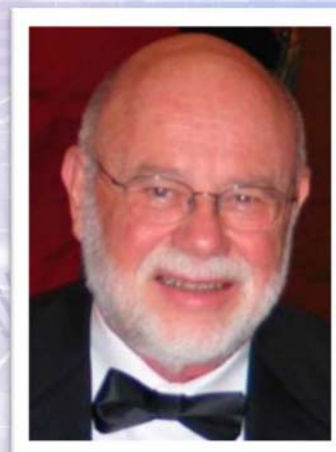
P.O. Box 23228, Santa Barbara CA 93121

Number of persons \_\_\_\_\_ \$ \_\_\_\_\_ Check # \_\_\_\_\_

Name(s): \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Richard Norwood's 30-year career at IBM included work in advanced technology and product development. He also taught mechanical engineering at the National Technical University in Quito, Ecuador, during a two-year leave of absence. After retiring from IBM in 1991, he taught for ten years at the University of Colorado in the Mechanical Engineering Department. He holds a BS, MS, and ScD degrees from MIT.



Dick and his wife, Anne, live in Boulder, Colorado; for many years they also stayed in Santa Barbara during the winter. VISTAS courses he has presented in recent years include "The Scientific Revolution" (2010); "Why Women Do the Housework: The Industrial Revolution" (2018); and "Damming the Colorado" (2016).



## VISTAS Calendar

**SUBJECT TO CHANGE; for up-to-date information, visit our website ([VistasLifelongLearning.org](http://VistasLifelongLearning.org)) frequently!**

| Course / Event                                      | Date(s)                       | Time            | Venue                   |
|---|-------------------------------|-----------------|-------------------------|
| Annual Fall Picnic                                  | Sunday, September 19          | 12:30 pm        | Tucker's Grove          |
| Nonfiction Book Club 1 / Dawn McGrew                | 2nd Thursday monthly          | 1:30 pm         | Meets in a private home |
| Nonfiction Book Club 2 / Dawn McGrew                | 4th Monday monthly            | 1:30 pm         | Via Zoom                |
| <b>Short History of Cryptography / Dick Norwood</b> | <b>Wed. Sep. 1, 8, 15, 22</b> | <b>10:00 am</b> | <b>Via Zoom</b>         |
| Humanity's Relationship with Food / Larry Canepa    | Fri. Sep. 3, 10, 17           | 1:00 pm         | Via Zoom                |
| Important Economic Issues / Peter Naylor            | Wed. Sep. 29, Oct. 6, Oct. 13 | 9:30 am         | Bethany Congreg. Church |
| Great American Waterways / Jim Hemmer               | Mon. Oct. 11, 18, 25          | 9:30 am         | Bethany Congreg. Church |
| James Baldwin: In His Own Words / Denny Klos        | Wed. Nov. 3, 10               | 9:30 am         | Goleta Library          |
| Origins of Proto-Indo-European Lang. / J. Hemmer    | Mon. Nov. 8, 15               | 9:30 am         | Goleta Library          |
| The Story Behind Bellosguardo / John Ummel          | Tues. Nov. 16                 | 9:30 am         | Venue TBD               |
| Frayed Am. Social Safety Net / Ted Anagnoson        | Mon. Nov. 22, 29, Dec. 6, 13  | 9:30 am         | Bethany Congreg. Church |
| "Sounds Good! Does It Work?" / Phil Sokolove        | Tues. Nov. 30, Dec. 7, 14     | 9:30 am         | Venue TBD               |
| Am. Criminal Law & Procedure / Pat McKinley         | Wed. Dec. 1, 8, 15            | 9:30 am         | Goleta Library          |