mechanism in the context of the Standard Model. Prerequisite: PHYS481.

A study of crystallography, x-ray diffraction, properties of crystalline and amorphous solids, band theory of solids, and lattice dynamics. Prerequisite: PHYS411.

PHYS475 (2.5)

A review and synthesis of physics concepts and analytical and experimental techniques in preparation for entry into a graduate program. Topics include classical, statistical and quantum mechanics, waves and classical fields. Prerequisite: PHYS411.

**PHYS477 ♦** \$ (1)

Important phenomena, equipment, and techniques in modern experimental physics. Repeatable to 2 credits.

The mechanics of small-scale physical phenomena as developed by Heisenberg, Schroedinger, and Dirac. Treatment of square well, step, and harmonic oscillator potentials; uncertainty relations; and symmetries to include angular momenta. Prerequisite or concurrently enrolled in PHYS411.

PHYS495 (1-3)

Individually directed study or research in selected fields of physics. Repeatable to 6 credits. A minimum of 4 hours work per week is required for each credit earned. A written paper required. Approval of the instructor required.

PHYS530 (1-3)

Discussions on 1) the principles of physics and effective approaches for teaching them, or 2) the physics lab, its purposes, administrative and safety procedures, essential equipment, seminal experiments, data analysis, lab journal, and reports. Repeatable to 9 credits.

PHYS540 (2-3)

Study in one of the traditional areas of graduate physics such as electromagnetic theory, analytical or quantum mechanics, solid state, atomic, nuclear or high energy physics, astrophysics, relativity, or mathematical physics. Students must complete assigned readings and problems. Satisfactory performance on a written or oral comprehensive exam required. Repeatable to 9 credits.

PHYS648 (1-3)

PHYS690 (1-3)

Independent problems of research in selected fields of physics. Open to qualified students who show ability and initiative. Repeatable to 6 credits. A minimum of 4 hours work per week expected for each credit earned. Prerequisite: Consent of department chair.

# RELIGION AND BIBLICAL LANGUAGES

Griggs Hall, Room 214 (269) 471-3177 Fax: (269) 471-6258 religion@andrews.edu http://www.andrews.edu/RELG

#### Faculty

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Elly H. Economou A. Josef Greig S. Douglas Waterhouse

BA: Theology Pastoral Ministry Secondary Education Youth Ministry BA: Religion BA Distance Degree: Religion
Secondary Education Youth Ministry BA: Religion
Youth Ministry BA: Religion
BA: Religion
<b>8</b>
BA Distance Degree: Religion
AA: Personal Ministries
AA Distance Degree: Personal Ministries
Minor in Religion
Minor in Biblical Languages
Minor in Missions

# **Programs**

## **BA:** Theology

Choose from one of the following:

### Pastoral Ministry Emphasis—68

RELB110, 115, 210, 214, 335, 406, 476; RELH316, 317; HIST404; RELP200 (Twice), 240, 331, 332, 333, 334, 441, 442; RELT100, 226, 250, 308, 340, 400; BIBL211, 212, 311, 312, 321, 322, 427.

**Required Cognates (9 credits):** HIST404; RELH316, 317. Minimum grades of C- must be earned in HIST404 and in all RELB, RELH, RELP, and RELT courses that apply to major requirements.

### Youth Ministry Emphasis—76

RELB110, 115, 210, 214, 335, 406, 476; RELP200 (Twice), 240, 331, 332, 333, 334, 335, 441, 442; RELT100, 226, 250, 308, 340; BIBL211, 212, 311, 312, 321, 322.

Choose three from ANTH200, BHSC220, FMST454, 456, PSYC204, 251, 252, 319, 454, SOCI120, 345, 415, 430

**Required Cognates (6 credits:** HIST 404; RELH317. Minimum grades of C- must be earned in HIST404 and in all RELB, RELH, RELP and RELT courses that apply to major requirements.

 $Secondary-Education\ Emphasis--56$ 

RELB115, 210, 214, 335, 406, 476; RELT100, 226, 250, 308,

BIBL304 V (3)

AU/HSI course—intermediate course in Greek to provide a fair working knowledge of the New Testament in the original language. Prerequisite: BIBL205H or equivalent.

AU/HSI course. Continues to refine the student's working knowledge of the New Testament in the original language. Prerequisite: BIBL304H or equivalent. BIBL304H and 305H together are equivalent to BIBL212.

Syntax of the Greek New Testament including practical

**RELP333** (1)

Explores the dynamics of effective preaching to a particular cultural group with an emphasis on the distinctive homiletical, rhetorical and cultural qualities required for the effective proclamation of the Gospel to each group. Weekly lab required. Prerequisite: RELP332.

RELT320 V (3)

AU/HSI course. The dynamics of personal evangelism with primary emphasis on instruction rather than exhortation. A clear biblical perspective on the priesthood of all believers; practical counseling for leading someone to Christ; a strategy for visitation; a Bible study methodology; and techniques in getting decisions.

Considers how the Judeo-Christian tradition confronts the moral complexities of a highly technical society. Are there universal absolutes that cross all cultural boundaries, or are all values relative? Designed to help students articulate what molded their value system and what should help to shape it. Students are expected to participate in some organized church/civic/social service activities. Student can earn general education credit in either RELT340 or 390, but not in both. Prerequisite: RELT100.

AU/HSI course—see content above.

A religious, philosophical, and activist approach to environmental issues, analyzing ideological causes of environmental degradation, and offering philosophical and theological perspectives which inform and sensitize the student to the Christian's environmental responsibility. Qualifies as an "S" course for General Education Service Learning. Contains a service component.

Designed for the student to examine differing ethical models and to develop a personal model that will serve as the basis on which a Seventh-day Adventist Christian will make personal value decisions. The developed model is used in examining actual ethical issues which confront people in daily affairs of business life. Student can earn general education credit in either RELT340 or 390, but not in both. Prerequisite: RELT100. (Open only to upper division BBA students).

Designed for the senior theology major as a means to address current issues and doctrines in the Seventh-day Adventist Church. Students present the results of their scholarly research in a seminar format.