Accounting

CLU's program in accounting prepares students not only for a career as a Certified Public Accountant (CPA), but also for employment in private industry, nonprofit organizations, higher education, and government agencies. The curriculum provides a careful balance of practice and theory, and consists of a solid liberal arts core, a carefully selected set of business-related classes, and intensive work in various aspects of accounting. Accordingly, students are also well-prepared for graduate studies and have been successful in passing the CPA exam.

Accountants perform an essential and highly-valued service for business and industry. Moreover, they perform a myriad of tasks in a variety of settings. They may compile detailed records of business transactions, prepare financial statements, perform audits, prepare tax returns, and assist in tax planning and managerial decision-making. They may also analyze financial information and provide small-business consulting services. Since the accountant of today must be a "jack-of-all-trades" who can fit comfortably into any business setting, CLU's accounting majors receive extensive preparation in both general business and the liberal arts.

Many of CLU's accounting majors have been successful in securing internships with local businesses and accounting firms, and many are offered full-time positions upon graduation. These opportunities enable CLU's accounting students to gain hands-on experience as they begin to narrow their focus to a particular career path. In recent years, students have been employed by Ernst & Young, KPMG, Deloitte, PricewaterhouseCoopers, CBIZ, Sony Pictures, NASA, Walt Disney Company, and many others. According to many studies, employment opportunities for accountants are expected to continue to grow at a faster pace than most other professions.

The Accounting Association, a student-run organization at CLU (with faculty advisers), has been in place since 1984. This student club arranges for guest speakers, social events, and fundraisers. Many CLU students get their first "taste" of the accounting world, and form key friendships, by attending Accounting Association functions.

The mission of CLU's program in Accounting is to prepare students for a career in public accounting, private industry, governmental/nonprofit accounting, and accounting education; for professional exams such as the CPA and CMA; and for graduate studies. Concomitant student goals are to acquire a well-rounded and solid footing in the liberal arts, to think critically and independently, to communicate effectively both orally and in writing, to maintain high ethical standards, to be good global citizens, and to understand and appreciate the diverse nature of human beings.

Bachelor of Science in Accounting

79 credits minimum, 62 credits upper division.

BUS 251	Principles of Accounting	4
BUS 252	Managerial Accounting	4
Select one of the following:		5-6
ECON 203	General Economics	
ECON 200/201	Introduction to Micro-Economics and Introduction to MacRo Economics	
MATH 245	Applied Calculus	4
BUS 257	Practicum in Accounting	2
BUS 352A	Intermediate Accounting	4
BUS 352B	Intermediate Accounting II	4
BUS 367	Behavior in Organizations	4
BUS 374	Business Law	4
BUS 375	Principles of Marketing	4
BUS 391	Principles of Finance	4
BUS 451	Cost Accounting - Computer Application	4
BUS 452	Tax I	4
BUS 453	Auditing	4
BUS 454	Advanced Accounting	4
BUS 462	Tax II	4
BUS 301	Communication for Managers	4
or COMM 306	Business and Professional Communication	
ECON 311	Statistical Methods	4
BUS 484	Senior Seminar in Accounting - Capstone	4
Select one of the following:		4
PHIL 300	Ethics	
PHIL 315	Social Ethics	

PHIL 350	Technology and Value	
REL 350	Contemporary Christian Ethics	
REL/BUS 354	Theology and Business Ethics	
Upper Division Elective Credits		2

Total Hours 81-82

Courses

Lower Division

BUS 151. Introduction to Business. (4).

Students will have instruction in various business and economic topics (Marketing, Management, Finance, Personal Financial Planning, Economics, etc.) to better prepare them for making informed choices in selecting their ultimate degree and emphasis areas of study. Students will benefit from an introduction to advising and academic guidance. They will have an opportunity to meet with and be instructed by various faculty members from the school of business on a "guest professor" basis. Students in this course will participate in benchmarking exercises to contribute to outcomes assessment reports.

BUS 251. Principles of Accounting. (4).

An introduction to the basic assumptions that underlie modern accounting: the principles, procedures and methods applied in the preparation of financial statements.

BUS 252. Managerial Accounting. (4).

An examination of how accounting data is used, communicated and interpreted for internal use. Emphasis is placed on planning, control and decision making, particularly in a manufacturing setting. This course will include instruction in and application of computer spreadsheet programs. The student will be required to use word-processing and spreadsheet programs for work submitted during this course. In addition, an introduction to and use of Internet research resources are included in the course syllabus. Prerequisite: BUS 251.

BUS 253. Financial Information in Business Organization. (4).

This course is designed for non-business majors who are not required to take Principles of Accounting or Managerial Accounting. The intent of the course is to provide students with sufficient background in accounting and finance to allow them to function more effectively in their chosen careers. To that end, the course will cover the basics of financial accounting and managerial accounting, with some additional material typically covered in finance and economics courses.

BUS 255. Environment of Business. (4).

This course provides an introduction to and an overview of topics and disciplines addressed and taught in a typical Schools of Management curriculum. The topics are important background for the non-business major. It is an introductory-level treatment of course topics required in business emphasis areas: Accounting, Finance, Marketing, Management, Economics, and others. Career Services on campus are the basis for assignments with a focus on career readiness. Spreadsheet software is taught and used for completing assignments for the course. Importantly, expectations and standards for further coursework will be communicated so students are better able to set goals for success in their academic pursuits and chosen career.

BUS 257. Practicum in Accounting. (2).

Basic principles of accounting will be presented as a review for a solid foundation in GAAP and accounting. The course will include theory, as well as the completion of hands on financial statements using Excel and other software.

BUS 275. Intro to Advertising. (3).

An exploration of advertising from the management-marketing, consumer and communications creativity viewpoint. Focus is on general principles and broad perspectives with particular emphasis on strategy and how advertising fits into the total sales program.

BUS 282. Selected Topics. (1-4).

BUS 282C. ST: Select Topic (core). (1-4).

Select topic approved to satisfy core.

Upper Division

BUS 301. Communication for Managers. (4).

The study of business communications methods with emphasis on planning, organizing, preparing and presenting major reports. Significant use of computer skills will be included, as well as design and structure of communication materials for the highest levels of impact.

BUS 310. Managerial Use of Information Systems. (4).

This course investigates the nature and uses of various types of information systems in business organizations, including decision support systems, expert systems, executive and management information systems, and communication systems. Examines the relationships between information system use and business strategy and the applications of information systems in the development of competitive advantage. (Bachelor's Degree for Professionals only).

BUS 321. Computer Organizations and Architecture. (4).

Principles of computer organization and architecture are introduced from a layered point of view, beginning at data representation and progressing through the machine language execution cycle. Representative hardware-software tradeoffs in the implementation of various computer system components will be presented. The design and interface to a variety of peripheral devices will also be discussed. The emphasis will be on the hardware aspects of a computer system.

BUS 342. Marketing Research/Consumer Behavior. (4).

A detailed focus on marketing research, strategy, statistical techniques and decision-theory concepts. Includes the nature of the influences affecting consumer behaviors, values, lifestyles, market segmentation, motivation and attitudes that form consumer marketing decisions. Prerequisite: junior standing.

BUS 344. Copywriting/Storyboarding in Broadcast Advertising. (4).

Designed as a "hands-on" communication and business course, this course provides an overview of broadcast media and develops skills in basic advertising/public relations campaign production techniques including scripting, copywriting and storyboarding. (cross-listed with COMM 344).

BUS 347. Introduction to Sports Management. (4).

Includes (a)sport law - impact of the legal process on sport, (b)sport economics - how the price and market system, income and employment affect the sport enterprise, (c)sport marketing/promotion - effect of marketing and promotion on the economic well-being of the organization,(d)sports administration - overview of the total responsibilities of the sport administrator, including planning, organizing, staffing, directing, and controlling the sports enterprise.

BUS 350. Data Communication and Networks. (4).

Includes a discussion of distributed data processing, communication techniques, wide-area and local-area networks, integrated services digital network, open-systems interconnections, security and network management.

BUS 352A. Intermediate Accounting. (4).

Includes detailed coverage of accounting theory and practice as applied to the corporate form of business. Topics include income statement, earnings per share, income tax allocation, compound interest, revenue recognition, price-level accounting, an introduction to fund accounting and a thorough treatment of balance sheet accounts. Prerequisites: BUS 251 (for BUS 352A), BUS 352A (for BUS 352B).

BUS 352B. Intermediate Accounting II. (4).

Includes detailed coverage of accounting theory and practice as applied to the corporate form of business. Topics include income statement, earnings per share, income tax allocation, compound interest, revenue recognition, price-level accounting, an introduction to fund accounting and a thorough treatment of balance sheet accounts. Prerequisites: BUS 251 (for BUS 352A), BUS 352A (for BUS 352B).

BUS 354. Theology and Business Ethics. (4).

This course applies ethical theory to business decisions within the context of theological reflection. With a strategic focus, the course will investigate the relationship between theological ethics and the economic concerns of managers. The course is particularly designed to help students become effective ethical agents by developing the skills to apply ethical principle to strategic business decisions. (cross-listed with REL 354).

BUS 355. Client/Server Fundamentals. (4).

Discusses modern technology in network communication and cooperative computation. Topics include client/server design concepts, software expectations, hardware requirements, service support and training issues. Prerequisite: CSC 220 or CSC 300.

BUS 361. Human Resource Management. (4).

A study of the use of the human resources within the organization. Includes recruiting, selecting and training employees, wage administration and union relations. Focus is on government regulation of employment practices, including Equal Opportunity Employment and affirmative action.

BUS 365. Organization Theory. (4).

Analysis and design of modern organizations with an emphasis on organizational technology. Perspectives include organization design, organization effectiveness and changing organization culture, and the organization and its external environment. Attention is given to emerging global realities. Integrates theoretical knowledge with practical applications.

BUS 367. Behavior in Organizations. (4).

An introduction to the methods and findings of the behavioral sciences on the persisting human problems of organizations. Attention is given to the roles of individual attributes, group dynamics and organizational structure in determining levels of performance at work. Prerequisite: junior standing.

BUS 370. Multimedia Technology. (4).

Introduces modern multimedia technologies. Topics include basic concepts, principles, sound images, animation, standards, hardware and software requirements, new technologies, current research and practice, and future directions.

BUS 374. Business Law. (4).

The study of law as it relates to business. Topics include contracts, agencies, commercial paper, personal property, sales, real property and insurance.

BUS 375. Principles of Marketing. (4).

The study of marketing methods and practices. Topics include policies and problems related to consumers, pricing, advertising, management information systems and distribution and management of the marketing function. Prerequisite: junior standing. (cross-listed with COMM 375).

BUS 376. Sales Management. (4).

This course concerns the sales and sales management functions as they exist in business-to-business sales settings. The course discusses current problems in sales management and the design of effective sales management processes and systems. Prerequisite: BUS 375.

BUS 380. Principles of Advertising. (4).

An exploration of advertising from an integrated marketing communications perspective. Focus is on general principles and broad perspectives with particular emphasis on strategy and the role of advertising in an integrated program. Students will examine consumer motivation, planning and development, the creative process and campaign execution and evaluation. (cross-listed with COMM 380).

BUS 381. Information, Systems, and Organizational Design. (4).

Surveys the major components of business information systems (hardware, networks, data and applications) and investigates the interrelationships between information, systems, organizational structure, processes and strategy.

BUS 391. Principles of Finance. (4).

Introduces students to the field of finance through an applied conceptual framework using problem sets and computer software to analyze various financial dilemmas. Topics include security valuation, risk analysis, working capital management, financial budgeting and planning, time value of money concepts, financial ratio analysis and capital budgeting. Prerequisite: BUS 252.

BUS 392. Intermediate Finance. (4).

Students learn to appreciate the usefulness and limitations of financial statements in valuation concepts and financial analysis and are made aware of the value of the role of financial information in capital markets. Concepts are reinforced through problem sets. Prerequisite: BUS 391.

BUS 393. Corporate Finance. (4).

Provides a conceptual framework for analyzing the major types of investment and financial decisions of corporations. The course reviews modern financial theory related to capital structure, cost of capital, dividend policy, intermediate and long-term financing, corporate restructuring and capital budgeting. Employs a mix of problem sets and cases. Prerequisite: BUS 391.

BUS 394. International Business. (4).

Covers international trade and its effect on the world economy. Includes the problems of the multinational firm and the impact of numerous environmental factors on the conduct of business across national boundaries.

BUS 395. Financial Strategy. (4).

Deals with corporate financial strategies primarily in the areas of valuation, capital structure, external financing, bankruptcy, mergers and acquisitions. These issues are addressed mostly in the context of case studies that illustrate how ideas studied in introductory finance courses are applied to real-world situations. Prerequisite: BUS 391.

BUS 400. Graphical User Interface. (4).

An introductory course to user interface fundamentals. Topics include development methodologies, evaluation techniques, user-interface building tools, considerations in the design phase, identification of design rules and successful delivery of the design. Prerequisite: CSC 220 or CSC 300.

BUS 410. Database Management Systems. (4).

Studies the concepts and structures necessary to design and operate a database management system. Topics include data modeling, relational database design and database querying.

BUS 411. Sports-Related Marketing. (4).

An introduction to management and marketing issues in the sports industry, with a particular emphasis on major and minor league professional sports. Students will receive a broad overview of the structure of sports and its relationship to the dominant culture, the economy and the media. (cross-listed with COMM 411).

BUS 418. Business in China and India. (4).

Students investigate China and India in terms of the macro forces and factors that comprise the business environment in these "big emerging markets." Students work to understand the demographic, economic, socio-cultural, political-legal, technological and natural forces that influence business in China and India. They compare and contrast how business is conducted within the two countries as well as with foreign enterprises, and they assess current and emerging opportunities for business in the region. Through readings, online research, discussions, and case analyses, students learn what appear to be critical factors for business success in China and India.

BUS 420. White-Collar Crime. (4).

This course will provide students with a critical examination of white-collar crime and deviance, its impact on society, and what might be done to address this social problem. Cross-listed with CRIM 420.

BUS 422. Non-Profit Leadership. (4).

This course will provide an introduction to principles and practices of leadership with a focus on the challenges facing management in nonprofit organizations. The elements of the course include a survey of important issues facing the nonprofit sector and best practices with a focus on personal leadership development and implementation. Topics will include governance, strategic planning, volunteer retention, organizational leadership, strategic partnerships and fundraising. Study includes incorporation of experiential service learning opportunities to enhance development of core leadership skills and models. The assessments of student learning to be used in this course are outlined below.

BUS 429. Executive Roundtable. (4).

This course is designed to provide students with an appreciation of how management and finance theory are integrated into the strategies of the modern corporation. Each week, a different company executive provides a real-world perspective on how decisions are made and strategies are implemented in the modern corporation.

BUS 430. Integrated Marketing Communication. (4).

This course explores the role of communications in marketing management, the strategic integration of promotional tools, and the application of generic IMC concepts in various social and organizational contexts-commercial, non-profit, domestic, and international. Communication trends and technologies are illuminated. The impact of marketing communications on individuals and on society as a whole is critically evaluated. Through readings, discussions, and analyzing cases, students learn how communications objectives are accomplished through carefully chosen combinations of public relations, advertising, sales promotion, personal selling, database and online marketing. Prerequisite: BUS 375 / COMM 375 Principles of Marketing.

BUS 432. Non-Profit Leadership. (4).

This course will provide an introduction to principles and practices of leadership with a focus on the challenges facing management in nonprofit organizations. The elements of the course include a survey of important issues facing the nonprofit sector and best practices with a focus on personal leadership development and implementation. Topics include governance, strategic planning, volunteer retention, organizational leadership, strategic partnerships and fundraising. Study includes incorporation of experiential service learning opportunities to enhance development of core leadership skills and models.

BUS 439. Senior Seminar in Management Thought and Practice. (4).

The consideration of classic and contemporary writings on issues related to the management of the business enterprise and the role of business in the larger society. Prerequisite: senior standing.

BUS 440. Marketing Simulations. (4).

Emphasis is placed on the marketing planning function, consumer identification and buyer behavior, marketing strategies and price-value relationships.

BUS 442. Advertising Campaigns. (4).

Advances the principles learned in introductory advertising and marketing courses and includes the application of principles learned through the completion of an actual consumer-oriented marketing/advertising campaign. Includes lecture and lab. Prerequisites: BUS 375, senior standing. (cross-listed with COMM 442).

BUS 443. Event Planning and Management. (4).

The study of the theory and practice of various forms of event planning and management. The class will be using a hands-on approach to delve into this wonderful field and will include lessons on budget, d,cor, entertainment, types, and security issues. (cross-listed with COMM 443).

BUS 445. Marketing and Management of Services. (4).

Addresses marketing and management issues related to the service component of products, particularly products which are service-intensive. Topics include understanding the distinctive aspects of services, creating and delivering services, developing and managing the customer service function, balancing demand and supply in a service environment and others.

BUS 446. Theories and Practice of Leadership. (4).

Examines leadership from theoretical, historical and practical perspectives. Includes topics of trait, behavioral and contingency theories; the influence process; management vs. leadership, leadership and followership. Survey of leadership theory and research; characteristics of leaders, theories of leadership origins and psychological and social correlates. Interaction of personal and organizational factors in determining leadership effectiveness. (Bachelor's Degree for Professionals only).

BUS 447. Social Marketing. (4).

Reflecting the needs of social entrepreneurs, NGOs and nonprofit organizations, the course explores the use of marketing to effect behavioral changes for the benefit of individuals, society and the global environment. Social marketing is viewed in various organizational and cultural contexts, both domestic and international. Trends and technologies are critically evaluated. Through reading, discussion and practical application, students learn how social marketing objectives are accomplished through carefully chosen combinations of research, planning, implementation and program evaluation. Prerequisite: BUS 375 / COMM 375.

BUS 448. Organization Development. (4).

The study of planned change in organizations including diagnosis of the organization and implementation of organization development interventions. Emphasis on teamwork in organizations and survey development. Prerequisite: senior standing.

BUS 449. Managerial Leadership: Core Competencies And Skills. (4).

Focuses on the development of the core competencies and skills needed for effective managerial leadership at all levels of the organization. Each skill component will follow a five-step developmental pedagogy: (1) Assessment, (2) Learning, (3) Analysis, (4) Practice and (5) Application. Prerequisite: senior standing.

BUS 450. Advanced Public Relations. (4).

Students strengthen their command of the processes and techniques of public relations and apply them strategically to real-world PR stations. They apply the full process of public relations management, including research and analysis, planning, implementation, and control and evaluation, while producing a strategic PR plan and professional media kit. They role-play crisis communications planning and response in an emergency PR exercise. Ethical considerations in PR management are examined; the impact of current PR practices on individuals and society are critically evaluated. Prerequisite: COMM 342. (cross-listed with COMM 450).

BUS 451. Cost Accounting - Computer Application. (4).

Advanced study of the procedures used to determine costs for manufacturing operations. Includes process and differential costing, overhead allocation, profit-volume analysis, joint products and by-products and responsibility accounting. Emphasis is placed on making informed business decisions based on quantifiable data. Prerequisites: BUS 252; junior standing.

BUS 452. Tax I. (4).

A study of current federal tax laws and issues as they pertain to the individual taxpayer. Cases are used to provide practical experience in implementation of tax law interpretations; emphasis is placed on the evolution of the philosophy that drives development of the federal tax code. Prerequisite: BUS 251. (offered one semester each year).

BUS 453. Auditing. (4).

Covers the legal responsibilities, theory and procedures in the conduct of an audit and the making of an audit report. Prerequisite: BUS 352B. (offered one semester each year).

BUS 454. Advanced Accounting. (4).

Accounting for business combinations and the preparation of consolidated financial statements. Also includes accounting for partnerships, consignments, foreign currency translation, fund accounting and international accounting. Prerequisite: BUS 352B. (offered one semester each year).

BUS 460. Leadership Development. (4).

Focuses on developing and identifying the contibutors to and need for individual leadership competencies. Provides an overview of specific leadership development instruments, psychological contibutors to leadership effectiveness, and introspective evaluation of current leadership application. Prerequiste: senior standing.

BUS 461. Advanced Human Resource Management. (4).

Studies advanced human resource management problems and practices and is intended for students interested in a professional career as a human resource management specialist. Topics include selection, placement, employee development and employee relations in private and public sector organizations. Prerequisite: BUS 361.

BUS 462. Tax II. (4).

A study of tax laws and issues pertaining to business entities such as partnerships, C-corporations and S-corporations. Focuses on the taxation of estates and trusts and expands the study of personal taxation introduced in Tax I. Prerequisite: BUS 452. (offered one semester each year).

BUS 463. Exporting/Importing. (4).

Provides a pragmatic overview of the different aspects of importing/exporting and a working knowledge of the various terms and techniques essential to establish and maintain a profitable import/export business in America. Discussions and assignments will include the marketing organization, regulation, terms of access, documentation, shipments and financing involved with the international movement of products.

BUS 464. Project and Change Management. (4).

Project management is a increasingly prominent and requested discipline within organizations today. More and more companies are looking to experienced project managers to deliver company strategic objectives while applying proven project management principles to execute their projects. This course is an introduction to the basic fundamentals of project management. Students will receive a general baseline of project management knowledge based on the nine knowledge areas defined by the Project Manangement Institute (PMI). Prerequisite: junior standing.

BUS 468. Venture Development. (4).

A study of venture development through entrepreneurship. Designed to help the student discover the opportunities and challenges of operating a business enterprise. The student will apply concepts learned in other business courses to the business operation. Recommended: BUS 391.

BUS 469. Strategic Management (capstone). (4).

Complex business cases integrating the fields of marketing, finance, law, accounting, economics and industrial management provide a realistic view of how general managers deal with conceptual business problems. Cases include analysis of strategic, interpersonal business problems. Prerequisite: senior standing; prerequisite/corequisite: BUS 391.

BUS 470. Executive Roundtable Capstone. (4).

This course is designed to provide students with an appreciation of how management and finance theory are integrated into the strategies of the modern corporation. Each week, a different company executive provides a real-world perspective on how decisions are made and strategies are implemented in the modern corporation. The course will conclude with a comprehensive writing assignment, and will serve as a capstone option for invited students in the Business Administration degree program. Prerequisite: BUS 391.

BUS 472. International Finance. (4).

Focuses on the financial environment surrounding multinational businesses involved in international trade, investment and financing. Covers management of current assets and liabilities, including foreign financing decisions and techniques, and investigates foreign investment decisions, feasibility analysis and capital budgeting. The course uses problem sets and case studies to reinforce the concepts discussed in class. Prerequisite: BUS 391. Recommended: senior standing.

BUS 473. Marketing Management. (4).

Focuses on the effective design and management of the marketing function in a business organization and the development of effective marketing programs. Topics include strategic marketing plans organization and incentive structures for the sales force, product launch, marketing communication and integration with other essential management functions. Prerequisites: BUS 375, senior standing.

BUS 474. International Marketing. (4).

An exploration of international marketing conditions with emphasis on foreign market research; trade promotion; political, legal, economic and cultural environments; product and service adaptability; and the development of strategic marketing plans for multinational competition. Prerequisite: BUS 375.

BUS 475. Investment Analysis and Portfolio Development. (4).

Provides the necessary background to critically evaluate both the practical and academic literature on investments. Stocks and bonds are addressed in market equilibrium and within the context of portfolio development. The capital asset pricing model, market efficiency and the investment environment are covered. Prerequisite: BUS 391.

BUS 476. International Business Behavior. (4).

A review of current organizational development approaches developed in the United States for possible international application. Cultural influences fostering or hindering the development of effective humanistic organizations are explored. Prerequisite: BUS 394 or consent of instructor.

BUS 477. Personal Financial Planning. (4).

An in-depth study of personal budgeting and long-term planning, investment opportunities, credit, financial institutions, insurance, risk preferences and goals. Prerequisite: junior standing.

BUS 478. Pacific Rim/Art of Japanese Management. (4).

An examination of our international trading partners in the Pacific Rim with special attention to their history, culture and political, economic, business and management systems. Attention is given to an assessment of both American and Japanese approaches to management and slow-growth economies. (cross-listed with POLS 478).

BUS 479. Advanced Strategic Management. (4).

Applies the principles of business and industry analysis and strategy formulation to the coming economic battles between Japan, United States and Europe and among the major emerging international trading blocs. Prerequisite: BUS 469.

BUS 482. Selected Topics. (1-4).

BUS 482C. ST: Select Topic (core). (1-4).

Select Topic approved for core requirement.

BUS 484. Senior Seminar in Accounting - Capstone. (4).

In this rigorous course, the emphasis will be on the application of GAAP and OCBOA rules and regulations in the preparation of financial statements using a variety of software application. There will be numerous situations where students will use their analytical skills and prepare written documents used by CPAs and accountants. Prerequisite: BUS 453 & BUS 454.

BUS 485. Seminar. (2-4).

BUS 490. Independent Study. (1-4).

BUS 492. Internship. (1-4).

BUS 493. Field Studies. (2).

BUS 496. Directed Research. (1-3).