Political Science

Political science is the study of political systems and how they function. It has its origins in the fourth century B.C., when Aristotle set out to classify governments. Today it encompasses four major focus areas: International Politics, including the behavior of countries, trade regimes, and theories of war; American Politics, including political parties, interest groups, and legislative, judicial, and executive powers; Comparative Politics, including the nature of democracy and comparison of parliamentary and other political systems; and Political Theory, including philosophical considerations such as what constitutes a good society.

Students of political science gain an understanding of the political nature of the contemporary world, from simple acts such as choosing products as consumers to the complexity of global politics in the information age. As governments and the private sectors of society become more intermingled, political scientists become more valued for their understanding of how both systems work and for their reasoning and analytical skills. Majors in political science are prepared for entry level positions in a variety of fields and for graduate study. Advanced degrees in political science offer the applied skills often necessary for professional advancement.

Note: Good communication and computer skills are essential to political scientists. Students are encouraged to develop their communication skills by taking ENGL 3150 Writing in the Disciplines and COMM 1100 Public Speaking and to develop their computer skills by taking BUAD 2280 Computer Business Applications.

Programs

- Political Science, B.A. major
- Social Studies, B.A. (Political Science Emphasis) major
- Applied Public Policy minor
- International Relations minor
- Political Science minor
- Public and Non-Profit Management Certificate cert

Political Science, B.A. major

Required Credits: 42
Required GPA: 2.25

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

- PHIL 3380 Political Philosophy (3 credits)
  or POL 1100 Understanding Politics (3 credits)
- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)
- POL 3400 Political Theory (3 credits)
- POL 4100 Political Inquiry (3 credits)
- POL 4500 Thesis and Career Preparation (3 credits)

A. GENERAL

SELECT 15 SEMESTER CREDITS OF GUIDED ELECTIVES FROM

POLITICAL SCIENCE COURSES NUMBERED ABOVE 3000 WITH CONSENT OF ADVISOR. MAY INCLUDE INTERNSHIP UP TO 4 CREDITS:

SELECT 6 SEMESTER CREDITS OF GUIDED ELECTIVES FROM APPROPRIATE COURSES NUMBERED ABOVE 3000 WITH CONSENT OF ADVISOR. MAY INCLUDE INTERNSHIP UP TO 4 SEMESTER CREDITS.

Note: A total of up to 8 credits of internship may be taken.

B. PRE-LAW EMPHASIS

COMPLETE THE FOLLOWING COURSE:

- POL 4200 Constitutional Law (3 credits)

SELECT 18 SEMESTER CREDITS OF GUIDED ELECTIVES FROM APPROPRIATE COURSES NUMBERED ABOVE 3000 WITH CONSENT
OF ADVISOR.

SUGGESTED SEMESTER SCHEDULE FOR POLITICAL SCIENCE MAJOR, B.A.

The following is a list of required Political Science Major, B.A. courses arranged by year. This schedule is intended to help students plan their courses in an orderly fashion; however, these are only suggestions and this schedule is flexible.

Freshman
- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- Liberal Education requirements

Sophomore
- POL 1100 Understanding Politics (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)
- Liberal Education requirements
- Electives in Political Science

Junior
- POL 3240 Political Analysis (3 credits)
- POL 3400 Political Theory (3 credits)
- Liberal Education Requirements
- Electives in Political Science
- Courses needed for minor

Senior
- POL 4100 Political Inquiry (3 credits)
- POL 4500 Thesis and Career Preparation (3 credits)
- Electives in Political Science
- Courses needed for minor

Social Studies, B.A. major

Political Science Emphasis

Required Credits: 48
Required GPA: 2.50

Note: A minimum of 22 semester credits used to meet course requirements in I and II must be completed at Bemidji State University. No course grade below a C may be used to meet these requirements and a minimum GPA of 2.50 in this major is required for graduation. Students who desire a second field of emphasis are to consider a completion of a minor or a second major in that field. Such action may complement and increase the marketability of this major.

I REQUIRED CORE CURRICULUM

CAPSTONE COURSE
COMPLETE THE FOLLOWING COURSE:
- POL 4500 Thesis and Career Preparation (3 credits)

ECONOMICS COURSES
SELECT 1 OF THE FOLLOWING COURSES:
- ECON 2000 Markets and Resource Allocation (3 credits)
- ECON 2100 Macroeconomics and the Business Cycle (3 credits)

GEOGRAPHY COURSES
SELECT 1 OF THE FOLLOWING COURSES
- GEOG 2100 Introduction to Physical Geography (3 credits)
- GEOG 2200 Introduction to Human Geography (3 credits)

GEOGRAPHY COURSES
SELECT 1 OF THE FOLLOWING COURSES:
- GEOG 3410 Geography of North America (3 credits)
- GEOG 3800 Regional Geography (1-3 credits)
- GEOG 3810 Geography of Europe (3 credits)
- GEOG 3820 Geography of East, South, and Southeast Asia (3 credits)
- GEOG 3840 Geography of Africa (3 credits)

WORLD HISTORY
SELECT 1 OF THE FOLLOWING COURSES
- HST 2218 Medieval Europe (3 credits)
- HST 2219 Medieval European Culture (3 credits)
- HST 2228 Renaissance and Reformation Europe (3 credits)
- HST 2580 Russia (3 credits)
- HST 2600 Topics in History (3 credits)
- HST 2660 Women and History (3 credits)
- HST 2700 The History of World Religions (3 credits)
- HST 3159 The World at War, 1913-1945 (3 credits)
- HST 3208 Greece And Rome, 1500 BCE-500 CE (3 credits)
- HST 3258 The Roman Civil Law Tradition (3 credits)
- HST 3268 The Roman Revolution, 200 BCE-CE 14 (3 credits)
- HST 3277 Readings and Research in European History (3 credits)
- HST 3409 Colonialism and Modernization in the Non-Western World (3 credits)
- HST 3419 East Asia (3 credits)
- HST 3429 South and Southeast Asia (3 credits)
- HST 3449 Middle East (3 credits)
- HST 3459 Latin America (3 credits)

U.S. HISTORY
SELECT 1 OF THE FOLLOWING COURSES
- HST 2600 Topics in History (3 credits)
- HST 2610 Minnesota History (3 credits)
- HST 2640 United States Diplomatic History (3 credits)
- HST 2667 Men and Women: Gender in America (3 credits)
- HST 3117 American Revolutionary Era, 1763-1800 (3 credits)
- HST 3128 Testing Democracy: Reform in Antebellum America, 1787-1865 (3 credits)
- HST 3137 The American Civil War (3 credits)
- HST 3159 The World at War, 1913-1945 (3 credits)
- HST 3187 American West (3 credits)

POLITICAL SCIENCE COURSES
SELECT 1 OF THE FOLLOWING COURSES
- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

POLITICAL SCIENCE COURSES
SELECT 1 OF THE FOLLOWING COURSES
- POL 3100 American Foreign Policy (3 credits)
- POL 3130 Asian Political Development (3 credits)
- POL 3150 Topics in Political Science (1-3 credits)
- POL 3160 Comparative European Politics (3 credits)
- POL 3170 International Relations (3 credits)
• POL 3180 International Law and Organization (3 credits)
• POL 3190 International Political Economy (3 credits)
• POL 3200 Minnesota Politics (3 credits)
• POL 3210 Public Administration (3 credits)
• POL 3230 Environmental Politics (3 credits)
• POL 3410 Legislative and Executive Relations (3 credits)
• POL 3420 Campaigns and Elections (3 credits)
• POL 4200 Constitutional Law (3 credits)

SOCIOLOGY COURSES
COMPLETE THE FOLLOWING COURSES:

• SOC 2200 Social Movements and Change (3 credits)
• SOC 3010 Social Explorations: Classic and Contemporary Sociological Theory (3 credits)

II REQUIRED FIELD OF EMPHASIS
SELECT 18 SEMESTER CREDITS OF ELECTIVES FROM POLITICAL SCIENCE:

SUGGESTED SEMESTER SCHEDULE FOR SOCIAL STUDIES MAJOR, B.A.

The following is suggested for logical and effective scheduling but can be interpreted as flexible for meeting requirements and a student's particular needs. Students should meet with the Social Studies coordinator and advisor as early as possible in their planning.

Freshman - Sophomore

• Geography and History constitute the "matrix" of Social Studies and students should complete required core courses in these subjects first.
• Complete Liberal Education requirements

Junior-Senior

• Complete remaining core course requirements and courses for area of emphasis.
• Complete Professional Education courses
• Students pursuing the B.S. Teacher Licensure in Social Studies should complete GEOG 3460 no sooner than their junior year, preferably just prior to their student teaching.

Applied Public Policy minor

Required Credits: 32
Required GPA: 2.00

I REQUIRED CORE COURSES

COMPLETE THE FOLLOWING COURSES:

• ECON 2000 Markets and Resource Allocation (3 credits)
• ECON 3010 Public Economics (3 credits)
• ECON 3230 Benefit/Cost Analysis (3 credits)
• GEOG 2400 Introduction to Planning (3 credits)
• POL 1200 Introduction to American Politics (3 credits)
• POL 3200 Minnesota Politics (3 credits)
• POL 3210 Public Administration (3 credits)

II REQUIRED OPTION

SELECT 12 SEMESTER CREDITS FROM ONE OF THE FOLLOWING OPTIONS:

A. ENVR POLICY:

• GEOG 3560 Metropolitan Land Use Planning (3 credits)
• POL 3230 Environmental Politics (3 credits)
• SOC 3050 Environmental Sociology (3 credits)
• ECON 3040 Environmental Economics (3 credits)
or ENVR 3040 Environmental Economics (3 credits)

B. PLANNING:

• GEOG 2100 Introduction to Physical Geography (3 credits)
• GEOG 3570 Public Lands Planning (3 credits)
• GEOG 3560 Metropolitan Land Use Planning (3 credits)
• GEOG 3580 Regional Development Planning (3 credits)

C. AM POL/ECON:

• ECON 2100 Macroeconomics and the Business Cycle (3 credits)
• ECON 3070 Labor Economics (3 credits)
• ECON 3200 Economics of the Financial Sector (3 credits)
• POL 3410 Legislative and Executive Relations (3 credits)
• POL 3420 Campaigns and Elections (3 credits)

D. INT/POL/ECON:

• ECON 2100 Macroeconomics and the Business Cycle (3 credits)
• ECON 3400 International Trade and Finance (3 credits)
• POL 1300 Introduction to International Relations (3 credits)
• POL 3170 International Relations (3 credits)
• POL 3180 International Law and Organization (3 credits)
• POL 3190 International Political Economy (3 credits)

E. PUBLIC POLICY SERVICE LEARNING

COMPLETE THE FOLLOWING COURSE. (1 credit per semester; must be taken twice, but no more than 4 credits total)

• POL 3910 Directed Independent Study: Student Leadership (1 credit)

COMPLETE THE FOLLOWING COURSE:

• POL 3970 Internship (3 credits)

International Relations minor

Required Credits: 18
Required GPA: 2.00

I REQUIRED COURSES

Complete the following courses:

• POL 1300 Introduction to International Relations (3 credits)
• POL 1400 Introduction to Comparative Politics (3 credits)

II ELECTIVE CREDITS

Elective credits, you must complete 12 credits from groups A and B, with at least 3 coming from group B.

Group A: Political Science Electives (at least 6 credits)
Political Science Courses

**REQUIRED COURSES**

**COMPLETE THE FOLLOWING COURSES:**
- PHIL 3380 Political Philosophy (3 credits)
- POL 1100 Understanding Politics (3 credits)
- POL 1200 Introduction to American Politics (3 credits)
- POL 1300 Introduction to International Relations (3 credits)
- POL 1400 Introduction to Comparative Politics (3 credits)

**GUIDED ELECTIVES**

SELECT 12 SEMESTER CREDITS FROM POLITICAL SCIENCE COURSES NUMBERED ABOVE 3000 WITH CONSENT OF ADVISOR. MAY INCLUDE INTERNSHIP UP TO 4 CREDITS.

Public and Non-Profit Management Certificate
cert

Required Credits: 18
Required GPA: 2.50

Admission requirement: Sophomore status or prior work experience in the non-profit or public section. See program coordinator for additional details.

**I REQUIRED COURSES**

Complete the following courses:
- POL 3200 Minnesota Politics (3 credits)
- POL 3210 Public Administration (3 credits)
- POL 3320 Non-Profit Management (3 credits)
- POL 3330 Non-Profit Financial Management (3 credits)

Complete the following course for 3 credits:
- POL 3970 Internship (3 credits)

**Political Science Courses**

**POL 1100 Understanding Politics (3 credits)**
An introduction to the basic ideologies, concepts, processes and institutions of modern government and politics. Liberal Education Goal Areas 6 & 9.

**POL 1200 Introduction to American Politics (3 credits)**
An introductory survey to the institutions and actors such as the media, interest groups, political parties, congress, and presidency of contemporary American government and politics. Liberal Education Goal Area 5 & 7.

**POL 1300 Introduction to International Relations (3 credits)**
Surveys various theories explaining the behavior of nation-states, the causes of war and peace as well as the role of multinational corporations and international organizations in international politics. Liberal Education Goal Areas 8 & 9.

**POL 1400 Introduction to Comparative Politics (3 credits)**
A comparative analysis of political systems and their functions in the context of unique cultures and histories. Liberal Education Goal Area 8.

**POL 1910 Directed Independent Study (3 credits)**
Arranged individual study.

**POL 1920 Directed Group Study (3 credits)**
Arranged group study.
POL 1930 Experimental Course (3 credits)
A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

POL 1940 In-Service Course (3 credits)
A course for practitioners seeking additional training or expertise in their current vocation or profession. The in-service format typically includes an educational experience in which a University faculty member and a group of students concentrate on working toward the resolution of a specific problem.

POL 1950 Workshop, Institute, Tour (3 credits)
An intense, credit-granting academic experience of short duration (usually from two days to two weeks) that is not listed in the current University curriculum. Provides for the practical application of theoretical learning within a group setting, and may include the development of methods and skills and the discussion of ideas and principles.

POL 1960 Special Purpose Instruction (3 credits)
A course intended for specific groups or organizations outside the University community.

POL 1970 Internship (3 credits)
Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

POL 1980 Research (3 credits)
Research carried out by the student that is based on appropriate methodology and scholarship.

POL 1990 Thesis (3 credits)
A thesis written by the student that reports extensive original research carried out by the student and demonstrates appropriate methodology and scholarship.

POL 2910 Directed Independent Study (3 credits)
Arranged individual study.

POL 2920 Directed Group Study (3 credits)
Arranged group study.

POL 2925 People of the Environment: Political Science Perspective (3 credits)
An introduction to political processes and institutions involved in making environmental policy. Might not be offered every year. Liberal Education Goal Area 10.

POL 2930 Experimental Course (3 credits)
A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

POL 2940 In-Service Course (3 credits)
A course for practitioners seeking additional training or expertise in their current vocation or profession. The in-service format typically includes an educational experience in which a University faculty member and a group of students concentrate on working toward the resolution of a specific problem.

POL 2950 Workshop, Institute, Tour (3 credits)
An intense, credit-granting academic experience of short duration (usually from two days to two weeks) that is not listed in the current University curriculum. Provides for the practical application of theoretical learning within a group setting, and may include the development of methods and skills and the discussion of ideas and principles.

POL 2953 Study-Travel, History and the Social and Behavioral Sciences (1-6 credits)
Study Travel course in Political Science for Lib Ed Goal Area 5.

POL 2960 Special Purpose Instruction (3 credits)
A course intended for specific groups or organizations outside the University community.

POL 2970 Internship (3 credits)
Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

POL 2980 Research (3 credits)
Research carried out by the student that is based on appropriate methodology and scholarship.

POL 2990 Thesis (3 credits)
A thesis written by the student that reports extensive original research carried out by the student and demonstrates appropriate methodology and scholarship.

POL 3100 American Foreign Policy (3 credits)
Traces the development of American foreign policy: its objectives, limitations, domestic and international factors influencing foreign policy. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3110 Canadian Politics (3 credits)
Explanation of Canada's history, political and economic systems, and regional variations within the nation-state. Special attention to political parties, ideologies, policy processes, and outcomes. (Might not be offered every year.)

POL 3130 Asian Political Development (3 credits)
Course investigates the unique political and economic challenges facing the countries of Asia and South Asia. Prerequisite: POL 1400. (Might not be offered every year.)

POL 3140 Comparative European Politics (3 credits)
Course includes an analysis of political structures and processes in Europe. The mechanisms of parliamentary governments, political parties, interest groups and ideologies are included. Prerequisite: POL 1400. (Might not be offered every year.)

POL 3150 Topics in Political Science (1-3 credits)
Course explores underlying political dimensions of topical issues. (Might not be offered every year.)

POL 3160 International Relations (3 credits)
The study of conflict and cooperation in international relations, the foreign policies of the great powers, international organizations, and the United Nations. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3170 International Law and Organization (3 credits)
Explores the role of international organizations such as the United Nations, economic alliances, international law, and regional consolidation in international politics. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3180 International Political Economy (3 credits)
Analyzes how economic policy decisions are made within and between countries and the effect these decisions have on affected interests in domestic and international politics. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3190 International Economics and Finance (3 credits)
The study of foreign exchange markets, the balance of payments, the role of the International Monetary Fund and the International Bank for Reconstruction and Development. Prerequisite: POL 1300. (Might not be offered every year.)

POL 3200 Minnesota Politics (3 credits)
Using Minnesota politics as a central focus, the role of and function of state and local governments in the context of American federalism is examined. (Might not be offered every year.) Liberal Education Goal Areas 5 & 9.

POL 3210 Public Administration (3 credits)
An introduction to the field of public administration. Emphasis is on the political dimensions of management in the public sector. Prerequisite: POL 1200. (Might not be offered every year.)

POL 3220 Environmental Politics (3 credits)
Investigates the dynamics of the policy process that produce our environmental policies. An analysis of actors, institutions, and organizations that shape U.S. environmental law and policy. Prerequisite: POL 1200 or consent of instructor. (Might not be offered every year.)
POL 3240 Political Analysis (3 credits)
Examines the application of political science research methodology to current questions of politics and public policy. Prerequisite: Completion of Liberal Education mathematics requirement (Goal Area 4) or consent of instructor.

POL 3310 Intersection of Public and Non-Profit Sectors (3 credits)
Studies federal, state and local agency policy domains and interactions; government agency grant making policies and procedures, ideological and partisan views of the public and non-profit sectors. Prerequisite(s): none.

POL 3320 Non-Profit Management (3 credits)
This course deepens students' understanding of the role of management and leadership in today's nonprofit sector. Topics covered include: the responsibilities and challenges facing today's non-profit managers, the role of the board of directors, planning, funding and staffing programs, financial accountability, and ethical decision making. Prerequisite(s): none.

POL 3330 Non-Profit Financial Management (3 credits)
This course examines the critical financial considerations of nonprofit organization, including sources of funds and fundraising, grant writing and management and financial accountability. The students will consider the key financial measures and strategies required to ensure the effectiveness and sustainability of the organization. The course will also consider nonprofit financial statements as indicators of financial health and sound management. Prerequisite(s): none.

POL 3400 Political Theory (3 credits)
This course surveys the development of western political thought. Included is an examination of some of the ideas and values associated with major social and political movements in Europe and the United States. Topics will vary and may include liberalism, conservatism, populism, democracy, communism, nationalism, facism, environmentalism, realism, and feminism. POL 1100 or consent of instructor. (Might not be offered every year.)

POL 3410 Legislative and Executive Relations (3 credits)
Explores the legislative process by analyzing the motives and evolving legislative styles of legislators in relation to the evolution and powers of the modern presidency and executive establishment. Prerequisite: POL 1200. (Might not be offered every year.)

POL 3420 Campaigns and Elections (3 credits)
Includes analysis of the congressional and presidential electoral process, including the role of political parties, interest groups, and the media. Prerequisite: POL 1200. (Might not be offered every year.)

POL 3910 Directed Independent Study: Student Leadership (1 credit)
Directed Independent Study

POL 3920 Directed Group Study (3 credits)
Arranged group study.

POL 3930 Experimental Course (3 credits)
A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

POL 3940 In-Service Course (3 credits)
A course for practitioners seeking additional training or expertise in their current vocation or profession. The in-service format typically includes an educational experience in which a University faculty member and a group of students concentrate on working toward the resolution of a specific problem.

POL 3950 Workshop, Institute, Tour (3 credits)
An intense, credit-granting academic experience of short duration (usually from two days to two weeks) that is not listed in the current University curriculum. Provides for the practical application of theoretical learning within a group setting, and may include the development of methods and skills and the discussion of ideas and principles.

POL 3960 Special Purpose Instruction (3 credits)
A course intended for specific groups or organizations outside the University community.

POL 3970 Internship (3 credits)
Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

POL 3980 Research (3 credits)
Research carried out by the student that is based on appropriate methodology and scholarship.

POL 3990 Thesis (3 credits)
A thesis written by the student that reports extensive original research carried out by the student and demonstrates appropriate methodology and scholarship.

POL 4930 Experimental Course (3 credits)
A course proposed for inclusion in the University curriculum. May not be offered more than two times as an experimental course.

POL 4940 In-Service Course (3 credits)
A course for practitioners seeking additional training or expertise in their current vocation or profession. The in-service format typically includes an educational experience in which a University faculty member and a group of students concentrate on working toward the resolution of a specific problem.

POL 4950 Workshop, Institute, Tour (3 credits)
An intense, credit-granting academic experience of short duration (usually from two days to two weeks) that is not listed in the current University curriculum. Provides for the practical application of theoretical learning within a group setting, and may include the development of methods and skills and the discussion of ideas and principles.

POL 4960 Special Purpose Instruction (3 credits)
A course intended for specific groups or organizations outside the University community.

POL 4970 Internship (3 credits)
Graded Satisfactory/Unsatisfactory only. Student internships may be either full-time or part-time in a public or private agency appropriate to the degree objective. Internships consist of closely supervised periods of service that are arranged in advance of the course registration. Students should consult their advisor concerning prerequisites.

POL 4980 Research (3 credits)
Research carried out by the student that is based on appropriate methodology and scholarship.

POL 4990 Thesis (3 credits)
A thesis written by the student that reports extensive original research carried out by the student and demonstrates appropriate methodology and scholarship.
All-University Courses

The course numbers listed below, not always included in the semester class schedule, may be registered for by consent of the advisor, instructor, or department chair, or may be assigned by the department when warranted. Individual registration requires previous arrangement by the student and the completion of any required form or planning outline as well as any prerequisites.

1910, 2910, 3910, 4910 DIRECTED INDEPENDENT STUDY
1920, 2920, 3920, 4920 DIRECTED GROUP STUDY
1930, 2930, 3930, 4930 EXPERIMENTAL COURSE
1940, 2940, 3940, 4940 IN-SERVICE COURSE
1950, 2950, 3950, 4950 WORKSHOP, INSTITUTE, TOUR
1960, 2960, 3960, 4960 SPECIAL PURPOSE INSTRUCTION
1970, 2970, 3970, 4970 INTERNSHIP
1980, 2980, 3980, 4980 RESEARCH
1990, 2990, 3990, 4990 THESIS